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Highclere, by Sir Charles Barry. From a remarkable series of drawings, letters, note books and journals relating to the work of Sir Charles Barry, Messrs. Banks and Barry and E. M. Barry, recently added to the library by Mr. Caryl Barry, A. Sir Charles Barry's great-grandson. The collection will be fully described in a future number of the JOURNAL.

JOURNAL OF THE
ROYAL INSTITUTE *of* BRITISH ARCHITECTS

VOL. 45. 3RD SERIES 21 MARCH 1938 No. 10

Journal

The Problems of a Rural Practice

Mr. Gunn's paper on the problems of a rural practice, which is published in this JOURNAL, produced one of the best all-round general meetings for a long time. Mr. Gunn was good, the discussion was good, and the attendance made the fears look silly of any who may have wondered whether a discussion on rural practice would interest the townsmen or bring the countrymen up for a night. As it happened, Mr. Gunn succeeded in attracting both town and country, and somehow managed to make them talk. More people spoke in the discussion than at any meeting for several years, and a good variety of opinion was expressed by architects and by many of the distinguished laymen who had been invited: landowners, men of authority on all to do with crops and cattle and land, and Mr. Robertson-Scott, the Countryman himself.

The proposer of the vote of thanks to Mr. Gunn was Sir George Courthope, who, as Chairman of the Forestry Commission, may perhaps be said to possess greater powers than any other individual to change the face of the countryside, but his most remarkable connection with architectural affairs is a romantic historical story that may or may not be true in all its details but is at least a building romance worth perpetuating. Sir George Courthope is Member of Parliament for Rye (which, it may be noticed in passing and perhaps in explanation, is in Puck of Pook's Hill's own county). In thirteen hundred and ninety something one of Sir George's ancestors, also Member for Rye, provided the wood to build Westminster Hall roof off his estate near Wadhurst. When the roof was restored in the nineteen twenties, the same estate of the present Sir George Courthope, also Member for Rye, for the second time provided the wood for Westminster Hall. But the story goes further than that, because when the first examinations of the roof were made prior to the last restoration it was not even known for certain whether the timber was oak or chestnut, so experts examined specimens and on the scientific evidence were able to say that the timber was indeed English oak and that similar oak could be found in Sussex now, growing on heavy retentive soil in parkland in rolling country. Thus by a combination of analytical science, study of tradition, and with no doubt the help of Puck in the background those responsible for finding the new timbers were led to Sir George Courthope's estate, ignorant, we believe, at the time that they had been led to the self-same parkland that produced the wood five hundred years before.

Mrs. Quennell and Honorary Associates

At the Council Meeting on 7 March, Marjorie Quennell (Mrs. C. H. B. Quennell) was elected the first woman Honorary Associate of the R.I.B.A. It is a precedent that has been easily made with such an outstanding reason for making it. Those who most keenly uphold "women's rights" are apt to resent most keenly the rather patronising way vain men fuss around with what is really self-congratulation on their broadmindedness when some woman receives her due in honour at their hands. But this election of Mrs. Quennell into that carefully selected body of Honorary Associates is a matter for self-congratulation. The occupations and interests of the five other new Honorary Associates give a good cross-section through the range of an architect's contacts with life outside the profession. Mr. Barron, the best of Trades-Unionists; Mr. Barton, a schoolmaster, and so it seems, by the way, everybody's master as one of the most successful publicists of contemporary art; Sir John Forsdyke, "Public Antiquary No. 1," as Director of the British Museum, also the Chief Librarian of the Museum, and perhaps in this list a representative of the clients too, since some of the greatest architectural improvements in the Museum's history are now taking place under his direction; Sir Ernest Simon, housing expert, local governor, sociologist, author; and Mr. Rex Whistler, the man who perhaps more than any other has brought mural decoration back into architecture.

Health, Sport and Fitness

The exhibition has proved to be one of the best the Exhibition Sub-Committee have produced. Attendance is satisfactory and the Press has been laudatory. H.R.H. the Duke of Gloucester visited it on 10 March and examined it in great detail. He was followed by Lord Stanhope (President of the Board of Education) and Lady Stanhope, who saw it together on 17 March. The following arrangements have so far been made for the provincial tour :—Hull, 1 to 21 May ; Bristol, 1 to 30 June (covering the British Architects' Conference at Bristol) ; Birmingham, 23 July to 13 August ; Coventry, 20 to 27 October. The following cities and towns have asked to have the exhibition but dates are not yet fixed : Manchester, Liverpool, Brighton, Blackburn, Eastbourne, Luton and Wolverhampton. Other bookings are being negotiated. Members living in these areas can do much to help to make the visit of the exhibition successful by offering help to the director of the local art gallery or museum and by publicising it among their friends. London members who wish to see it should do so before 31 March.

Gifts to the Library

During the last few weeks the Library has received some of the most important and delightful accessions that have come to it this century. One of the drawings from a remarkable collection of material relating to the Barry family is this number's frontispiece. This collection includes by far the most important group of drawings of the Houses of Parliament that has yet come to light ; studies mostly drawn by Charles Barry or in his office by Pugin, Banks, his son Charles or Gibson, dating from immediately after the competition to the latest stages in the development of the top structures of the Victoria and clock towers. No London building, probably no building in Great Britain, can provide the same accumulation of interest of every kind as that provided by the Houses of Parliament. Their place at the head of all the heirarchy of State buildings, their intrinsic merit artistically and in those curious ill-defined realms of talk called art-history, their purely romantic interest to [Londoners and visitors, these and numberless other contacts with scholarship, sentiment and sensibility all help to make the records now gathered in the R.I.B.A. of supreme importance. The other Barry material includes a number of large full-dress perspectives of several of the most important Barry jobs such as Highclere, Clumber, Chefden, also the complete or nearly complete sets of working drawings for the Reform and Travellers clubs and Birmingham Grammar School. But added to these graphic records there are note books, diaries, including the diary of his grand tour in Italy, Greece, the Levant, Syria, Palestine and Egypt in 1816-18, letters, including some between Barry and Paxton about the Crystal Palace, and minor documents.

This accession has come from Sir Charles Barry's great grandson, Mr. C. A. R. Barry [*A.*]. The Parliament drawings were purchased with the aid of a contribution from the Friends of the National Libraries, through whom the other drawings have been presented on what we call (most inaccurately) permanent loan—an arrangement which allows the benefactor to recover his possessions should he want, but that provides for their absolute ownership by the R.I.B.A. in due course. In the next Journal we hope to say more about the Friends of the National Libraries and to plead for support from architects for a body that has helped us considerably in recent months.

The Barry collection came just at the same time as another group of early xix century material of quite as great interest in a rather different way. Mrs. Dorothy Biggar, grand-daughter of Sydney Smirke, has given the Library a large collection of drawings and letters and other documents relating to the Smirke family, Sir Robert Smirke, R.A., and Sydney Smirke, his younger brother. This collection joins an existing collection of *Smirkiana* in the Library to make it one of the most complete collections relating to the work of one family in our possession. We have not yet had time to examine all these new possessions in sufficient detail to say quite what they include. The two most interesting items, however, seem to be a series of delicate sketches by Sir Robert for a great Napoleonic Wars Memorial situated either in St. James's or Green Park or at the head of Waterloo Bridge, and an almost complete series of letters written by Sydney when a young man about 26 to his father, brothers and sisters during his grand tour. Sydney Smirke was an ebullient, observant correspondent and these letters, which will be published in part, we hope have merits far transcending their purely architectural reference.

A Chamber Music Concert on 7 April

The next concert organised by the Music Group will be on 7 April at 8.30, when the Dorian Trio, consisting of Enid Lewis (piano), Mercia Stotesbury (violin) and Pauline Taylor ('cello), will perform a programme starting with Mozart's Trio in C, followed by Schumann's Trio in G Minor, and concluding with Huré's Suite sur des chants Bretons. The chamber music concerts organised by the Group have a high reputation already among those who have been to any of them. Those who have not yet been should come to this. It is free and no tickets are required, but it is hoped that everyone will buy a programme to help the Group to defray expenses.

Dance Club

The last dance of the series of four dances organised by the dance club will be held on 22 April, tickets 6s. each. Full particulars can be had from Mr. R. W. H. Robertson at the R.I.B.A.

The farm architect's problem. Pigs at Rothamsted and sties as they too frequently are. Sir John Russell suggested that these could be replaced now by unattractive but efficient standardised steel and concrete structures at £5 per pig, but that more pleasing brick and tile sties designed by an architect might cost up to £9 per pig

PROBLEMS OF A RURAL PRACTICE

By EDWIN GUNN [F.]

A Paper read before the Royal Institute of British Architects on Monday, 7 March 1938
The President, Mr. H. S. Goodhart-Rendel [F.] in the Chair

The chief and outstanding problem of a country practice is to secure worth-while work. This perhaps is equally true of any practice—town or country—but there are features of the specifically rural architectural field which intensify the problem.

In the first place, the general ignorance of the everyday person—the potential client—as to the status and qualifications of the architectural profession is even more profound in the country than in town. For this there are, in my judgment, two reasons. It is idle to suppose that in those not-so-distant days when most rural communities were virtually self-supporting each would embrace an architect. They did however usually comprise a builder, and it was the custom to resort to him for design as well as execution of any building for which the need was felt. There seems little doubt that most of the admirably simple buildings of our great-great-grandfather's day were produced under these conditions, and while tradition lasted and needs were so simple it worked well. In the country, custom dies hard, and it is still the first idea of most people desiring to build to have recourse direct to their favoured builder.

The second reason is more complicated, and difficult to state fairly without offence. Under the conditions above recited, architects of ability generally have required a wider field than their opportunities in country practice offer, and in consequence country practitioners tend to be a residue, whose abilities are low and whose advice few people will consider worth paying for on the R.I.B.A. scale. To say that country practitioners are, as a whole, outsiders, prepared to undercut

fees, and customarily to furnish crude and incomplete designs, would be a gross overstatement, but there are in most districts practising architects (so-called, frequently they are local officials), who do all these things, which (besides rendering it still more difficult for an able architect to live) lower the general status of the architectural profession with an indiscriminating public. The field for the *bona fide* practitioner is still further reduced by the tendency which is apparent whenever substantial building work is in prospect to bring in from the nearest big town or from the capital an architect of established reputation.

This leaves the unfortunate local man with a practice which consists in the main of difficult cases—varieties of architectural juggling tricks. He is likely to be invited to undertake jobs which the local builder does not care to tackle unaided, and which are deemed unworthy of acceptance by a real architect from town. Work of this sort will be found to constitute a big proportion of his orthodox practice, and in addition he will find himself invited by the builders, who have received commissions to build houses for customers, to prepare designs for these, which usually it is desired should be done *sub rosa*, without relations with the actual employer.

This perhaps will be thought to paint a rather gloomy picture of country practice. It certainly does intentionally stress the worst features—the problems. From this aspect, two improvements in attendant circumstances may in course of time be hoped for. Persistent corporate exposition of the functions and attainments of qualified architects, coupled with hoped-for compulsory registration, should eventually eliminate pretenders, thus ensuring that most of the work which should reward the architect for his years of training does in fact reach him. Secondly, this Institute might sponsor a movement which would recognise the value of local knowledge and close supervision as a supplement to specialised proficiency in particular classes of building such as local committees expect from city architects. Association of outside specialists with local practitioners is not unknown, but, so far as I can find, has never received official encouragement. It has perhaps been somewhat risky, while the level of local attainments has been so uncertain, but with the general improvement presaged above such practices ought to benefit alike both parties to such co-operation—and the employers also.

Descending from high professional policy to matters relating to the immediate conduct of a practice, I think it is fairly safe to say that the ordinary country practice is essentially a one-man show. It is this for several reasons, and attempts to make it otherwise are largely responsible for that departure from strict professional standards, such as the introduction of "sidelines" not strictly conformable to the code of practice. Architecture as a one-man show has outgoings which are almost negligible, so that the net income enjoyed need differ very little from the actual receipts. As soon as an assistant is employed, whether draughtsman or secretary, the outgoings are at least trebled, so that to produce an equivalent income an expansion of business quite considerable in extent must take place. But a steady flow of work can never be expected. The late Ernest Newton once said to me very truly that an architect is always worried—either because he doesn't know where the next job is coming from or because he can't get abreast of the work he has. The relative ease with which a city architect can expand and contract his staff by temporary help is virtually impossible to the country practitioner, who is out of contact with the pool of "improver" draughtsmen, and often has not space to accommodate them. Pupilage used to go some way to solve this problem, but was open to abuses only slightly parodied by Dickens in the case of Pecksniff. I could parallel the Chuzzlewit-Pinch affair in quite recent experience—not, I am glad to say, relating to a member of this Institute. But the pupil is almost a thing of the past, thanks to architectural schools and technical classes, and so far as relates to small country practices it is a very good thing too—for the pupils if not for the masters.

It must be recognised however that architectural practice as a one-man show requires special treatment. Clients as a rule are so close at hand and so interested in their undertakings that they are only too prone to visit their architect in season and out of season, discussing *ad nauseam* every possible aspect of every feature of their work. They are singularly slow to realise that while they are talking no work can be done—either their own or another's—and as they are usually of what is known as "the leisured classes," time seems of little consequence to them. The architect will be well advised to take a leaf from the doctor's book, and ordain definite office hours—say 10 to 11 and 4 to 5—leaving himself free to do some work in the intervals, and "sporting his oak" if need be to attain that end. Of course he will find that such things as specification writing must be done in hours which to the ordinary business man

would be hours of recreation—but that is not peculiarly a feature of country practice.

Relationship with builders is another aspect of the professional side of architecture which differs from town practice, and presents its own problems. For the minor everyday work of a country practice the architect will be dependent on a few firms only for contract work. He is of course privileged to know these thoroughly, and equally they will know him and all his special fads and fancies. This may be thought all to the good, and in fact it is so, so long as things go well. Human nature being what it is, however, there may come a time when—from one cause or another—relations with a particular firm engender a sense of grievance leading either to the architect excluding that firm from future tendering or to the builder declining to submit further prices to the architect. Such a position is much more serious than would be a similar taboo in town practice, and its possibility must inevitably curb any tendency to ruthlessness on the part of the architect in applying the more drastic rights which he nominally has under the standard contract. Steering a course which will at the same time satisfy both client and contractor is often a matter for tact and delicacy in such circumstances. Mr. Bulkeley Creswell's *Honeywood File* long ago brought out many of the types of pitfall which await the rash or unwary.

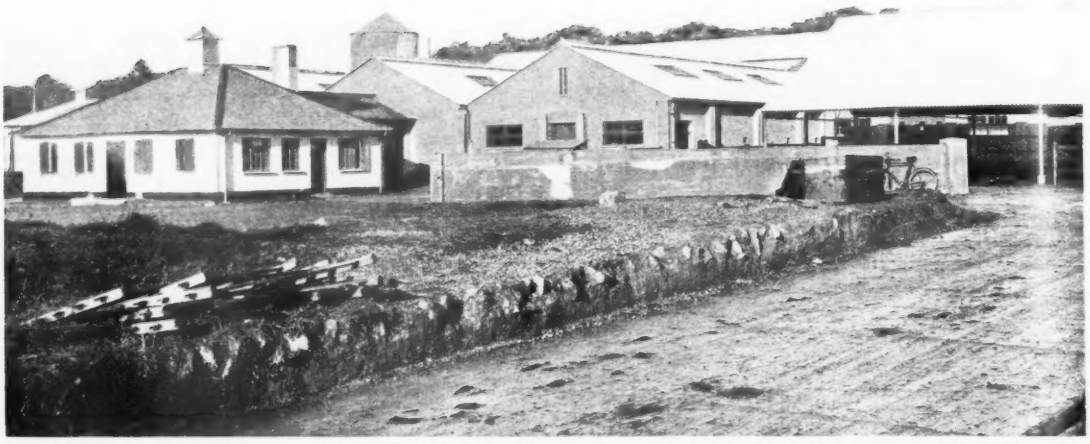
There is yet another relationship in which the country architect is likely to find himself working with the local builders, as well as in the orthodox contract capacity, and as the less orthodox designer of directly ordered work. Most country firms employ regularly a skeleton staff of tradesmen, for whom in slack periods they must find work. This means usually that some "hospital job" is maintained in being, on which these key men can be occupied when other work does not need them. If the architect has succeeded in impressing the builders with his good sense and ability in design (observe the order in which these qualities stand !) he will be asked to supply plans. This work is all grist to the mill, and I know no objection against the practice, but it is liable to produce some queer results unless exercised with caution. Designs supplied on these terms are apt to be treated with freedom by the builders who receive them, and unless some measure of control is stipulated by the architect he is apt to see concrete results which are damaging alike to his self-esteem and his reputation—for in the country everybody knows all about everybody else's business, and it is impossible to publish or announce a statement that the hideous coloured bricks or tiles of such-and-such a house formed no part of the designer's intentions !

Another of the problems of country practice is to secure reasonable prices for work which departs at all markedly from customary ways. Many very excellent and practical builders are all at sea in pricing bills of quantities, and where these are essential will either refuse, or send the bills for pricing to the nearest quantity surveyor in an adjacent town. In consequence it is not impossible to receive (nominally) three or four tenders which have actually all been priced by the same person. Common methods of pricing more usual work are the comparative, the cube rate, and the rough quantities (not on standard methods) and price book. It is remarkable how accurately many country builders can gauge the value of a simple house or cottage by mere comparison with something roughly similar which they have previously built. The cube rate method, baldly exercised, is of course quite unreliable, and puts the poor and the clever planner on a level, robbing ingenuity (in such matters as simple construction and compact arrangements of water services and drains) of its proper fruits.

It is perhaps noteworthy that among the tradesmen commonly directly employed there is seldom a plumber. Plumbing and water-fitting in the country is normally entrusted by builders to a subcontractor, and in some districts, whichever builder secures the work the same plumbing firm appears on the job. If this monopolist is a good man all is well ; but if he isn't — .

Another feature which will strike the town professional as odd is the manner of dealing with prime cost fittings. For a good-sized building it may be worth while to journey to the metropolis or the nearest large town where wholesalers exist and to select fittings which will be subject to the full discounts allowable. But for smaller jobs this is not commonly thought practicable, and such goods are obtained through local suppliers, ironmongers or plumbers, who consider (probably with justice) that the trade discounts or some portion of them are their perquisite. Presumably these sums represent their profit, and allowance is made elsewhere, but I wish I could be certain of this—generally pricing of these sections of the work seems high in proportion to the actual building structure.

At the start of this paper I mentioned the force of tradition (or custom), at one time nearly of universal sufficiency to produce good results. There



The old Parsonage Farm, Dartington, designed by Mr. O. P. Milne, in close collaboration with the farm manager, Mr. Nielsen. This farm is mainly concerned with highly efficient milk production. The plan is carefully designed to assist mass production circulation. The buildings are designed more with a view to economy and efficiency than appearance, though the compact grouping and the evident sense of order make the whole by no means displeasing

is however both good and bad tradition, and since the decay of the old craftsmanship many country districts appear to have developed some unpleasant building customs which are hard to displace. It would serve no good purpose to enumerate a list which is probably peculiar to one district, but as instances of my meaning I can cite the habitual use of black mortar for pointing, the exaggerated " collaring up " of joints in rubble masonry (aptly named " snail-crawling "), and the persistent belief that, whatever effort may be made to secure an orderly effect elsewhere, in kitchen quarters it is permissible for pipes to straggle and all attempt at tidy arrangement to be abandoned. The country (love it as one may) demonstrably lags behind the town in matters of design—not only in this habit of regarding kitchen quarters as something not meant to be seen, but by following fashions at one or two removes distance. Country shopkeepers are apt to be found installing new shop-fronts which involve the destruction of genuine old fronts of character such as town shopkeepers following the cycle of fashion are putting in !

Yet another circumstance in which country practice may be found to differ from town is in relation to local authorities and their officials. Big corporations may tend to be bureaucratic, but they are as a rule strictly impersonal. This is not always the case in country districts. The knowledge of who is behind or opposed to a proposal sometimes seems to make all the difference to its acceptance or rejection and the powers conferred on local authorities under various recent Acts afford the opportunity for discretionary action which is not always fairly exercised. In the early stages of their application many of the provisions of recent legislation savour so strongly of the " must not " that the doing of anything whatever in the form of development is rendered very difficult and slow. This perhaps would not give much cause for complaint were it not for the fact that architects' complete and fully informative drawings (which tell everything) are apt to attract more criticism than the crude and imperfect plans submitted by country builders, land agents, estate clerks of works, and the like. Such plans are often accepted without cavilling—one suspects largely from a feeling of hopelessness at the prospect of securing more complete and satisfactory drawings, the production of which by their authors is only accomplished (metaphorically) in blood and sweat.

One more of the trials of country practice arises

Rothamsted Experimental Station, designed by Sir Walter Tapper, R.A. *North front of farm building*

from disparity between the bye-laws current in adjacent districts which so far as actual needs are concerned appear entirely similar. The differences which strike most vitally at architectural design are those dealing with the height of storeys wholly or partly in the roof, and these can be taken as examples. In the area with which I am most familiar, one rural council has no bye-laws covering height of storeys, which can be 7 ft. or less if so desired, another stipulates for a minimum height at springing of 5 ft. with an *average* over the whole area of 8 ft., and other districts subject to urban bye-laws follow the normal model. A codification of bye-laws (other than city regulations, which conceivably may have special requirements) into uniform urban, intermediate, and rural types, varied only where there is local practice for which some reason can be shown, would greatly assist in ease of working—the present situation seems local option run mad, but we may no doubt look for more even regulation in 1939 when the three years from the passing of the Act of 1936 expire and all bye-laws become obsolete and have to be re-made. An even better practice, which I fear I shall not live to see established, would be removal of all responsibility for any but sanitary matters from local councils and their officials whenever a registered architect is in control. Council officials would then be free to give more close attention to these aspects, which seem more properly their concern. Architects thus given a measure of freedom (subject of course to compliance with the law) should then be subject to disciplinary control (with the maximum penalty—removal from the Register) in the event of offence against good practice in design or construction. In conjunction with compulsory registration on a sound educative basis, this would be, in my opinion, a real step forward to free design from hampering restrictions, but admittedly Utopian—the times are not ripe for it yet, and there are at present many architects in practice to whom few would be willing to entrust such powers.

It is possible that my next problem may not strike every architect in the same light—or even as a problem at all. I refer to circumstances produced by the owners of large estates who may attach as a condition to any development that designs should be submitted to and approved by their architect. In a high proportion of such cases intending builders

A country job *Edwin Gunn*

will fly to this architect—often with impossible schemes—in the belief that approval is then certain. I need not labour the difficult situation sometimes produced. This situation is even more undesirable when (as not uncommonly) the surveyor or sanitary inspector of a small authority, which pays its officials on a low scale, is permitted to undertake directly or indirectly architectural employment in his own district which will result in this official considering and passing (does he ever reject?) his own plans. The "designs" of these worthy, but harassed and overwrought, people, and those of an equally worthy but no more highly trained class—the estate clerks of works—are responsible for much of the needless uglification of the country. I know several such who positively *like* qualities and features which to an educated taste (whatever its design predilections) would be unhesitatingly classed as hideous.

So far I have concentrated, perhaps unduly, upon professional difficulties; I must now mention a few of the practical problems peculiar to design on rural sites.

The town architect, familiar with sites where, subject to compliance with bye-laws and regulations, he is sure of obtaining outlet for drainage to a public sewer, and a supply of water, gas, and electricity by simple connection to a service main, may find himself stumped when introduced to a site lying miles from any such services. This is particularly so since the decay of the big country house, which used to form the dream job of every aspiring architect, but is now all too rare, so that experience of the self-sufficient establishment is more limited. I may be accused of trying to teach my grandmother to suck eggs if I say that the first step in such a case is to find water, test its quality and sufficiency, and get such evidence as is possible as to the constancy of its flow. But I have had repeated proof that this essential preliminary is often neglected. Also it seems not generally realised that most valuable guidance in this matter can usually be obtained by reference to the records of the Geological Museum, and those held by experienced firms of well-sinkers.

Sometimes a public supply may be found in existence in a nearby village, but in such cases the local authority (parish council or the like) is very loth to extend on any terms which are acceptable. I have known cases where a series of separate service

New small houses *Edwin Gunn*

pipes, run more or less side by side for considerable distances, have been installed as the alternative to a main extension which if shared would have been far cheaper in first cost, less liable to corrosion or silting-up, and better in every way as an equaliser of supply, but once installed would have been "maintainable by the inhabitants at large."

Reverting to sewage disposal, when limited sites are in question, it must never be forgotten that some land by its natural features results in a stalemate. A cesspool or septic tank (as provided by bye-laws) or a properly designed bacterial purification plant, which is the preferable unrecognised alternative, must be distant at least 50 feet from any building and in such a situation that intentional effluent or accidental overflow cannot run on to a public road or to an adjoining owner's land. In some cases the dimensions of the site in conjunction with the slope of the ground render these conditions impossible of attainment. That is not always realised by clients, who buy sites before they have consulted their architect.

Then there is the heavy clay site, in which the absorbent quality of the subsoil is almost nil. In such cases any surface filtration area should be confined to the open topsoil and some artificial aid may be desirable. It might be more generally known that black-currant bushes are a valuable absorbent of partly purified effluent ; they are gross feeders and will suck up and thrive upon liquid which may otherwise merely stimulate the growth of rank weeds.

As to electricity, it is often necessary to convince clients that electricity mains adjoining their site are not directly available for connection. They may be high-tension mains, in which case a step-down transformer would have to be provided, which for a single consumer may prove an unwarrantable expense. If a private generating plant is provided, however "noiseless" this may be, it is wise to relegate it to an outbuilding, since noises quite inaudible by day often become worrying in the quietude of evening or night—this has even been found to apply to a thermostatically controlled electric refrigerator (nominally silent), the automatic starting and stopping of which at odd moments is sometimes irritatingly noticeable.

Gas is not often available away from fair-sized towns, except in the recently introduced form of bottled or "Calor" gas, which seems to be a boon. People who have once been used to gas appliances for cooking are always loth to change to other methods, for (*pace* the electrical industry) the gas cooker is the handiest and most trouble-free resource yet placed at our disposal.

Air gas or petrol gas can sometimes be usefully employed, and acetylene gas also on occasion.

I cannot bring my necessarily brief survey to a conclusion without a passing reference to some of the problems which are neither essentially pro-

fessional nor practical but attendant on country practice. The chief of these is the antagonism quite commonly displayed by the established community to *any* building where none formerly existed. To hear neighbours say "Just fancy, they are going to *build* on Jackson's field" is to realise just what a crime building is—quite apart from quality or suitability of design. Beyond this radical objection, there is also a remarkable degree of sensitiveness shown to the intrusion of any class of property which is considered lower in social status than any other within sight—and in some districts the provisions of the Town and Country Planning Act are freely invoked to support this outlook and they are being effectively employed to this end.

It is perhaps fortunate that points of contact on what may be called the quasi-legal aspect of architectural practice are infrequent in country districts. Party wall or light-and-air cases are much less common than in city work. This is particularly lucky for the country architect, for though London men may fancy the party wall procedure of the L.B.A. fearfully complicated, it is a blessing in that the rights and duties of the parties in all conceivable circumstances are clearly defined. In the country it is quite otherwise, and wherever questions of party structures or contiguous boundaries *do* arise—as they sometimes do in or about the neighbourhood of growing towns—they are matters for individual bargaining and agreement. I will close with an instance, within my own experience, which will illustrate the sort of position which can arise. On the outskirts of a small growing town a street of semi-detached houses standing on ample sites was in process of gradual replacement by business premises. One pair of the series was acquired by a bank, which desired to build to the full extent of its site. The adjoining owner flatly refused to consider any proposition involving either the erection of a party wall with its centre on the boundary or even for the projection of the footings of a wall built up to the boundary beneath his land—financial blandishments were abruptly rejected. As a consequence the bank was compelled to sacrifice on this side some 2 ft. 3 in. of useful space, with the prospect that eventually a like sacrifice would have to be made by the recalcitrant owner or his successor, and an unwanted passageway between the bank and its future neighbour would eventually be created. The bank however got the final kick by opening on its third floor two unwanted windows overlooking the neighbouring site, which during the ensuing 20 years would be steadily acquiring "Ancient lights" privilege, unless the "awkward" owner at considerable expense should erect without benefit of support from the flank wall which he had compelled them to build a lofty screen to obstruct these windows!

The Country House—Dartington Hall, Devon

VOTE OF THANKS AND DISCUSSION

Col. The Rt. Hon. Sir GEORGE COURTHOPE, Bt., P.C., M.C., M.P. : You have done me a great honour in asking me, who am probably one of the clients who drive architects mad, as Mr. Gunn said in his very able paper, to move a vote of thanks to Mr. Gunn. I do so with the very greatest delight. Like all of you, I have enjoyed his paper. As perhaps only Mr. Leslie Wood and myself have observed, it is a great compliment to a rural effort which is gaining ground that the privilege of moving and second this vote of thanks to Mr. Gunn has been entrusted to two people who are perhaps more closely identified with forestry than with any other rural activity.

I should like to make one or two comments on the very delightful paper to which we have just listened. First of all, I was very much struck and pleased by the references to the customs and traditions and simple tastes of our great-great-grandfathers and to the pleasing buildings which were produced by the local builder of those days, but I should like to suggest that possibly there was a third cause, besides simplicity and tradition, which led to the pleasing nature of those buildings ; I think that the economic conditions of those days compelled the builders of anything but very extravagant buildings to use local material, and, as far as my experience goes, local material almost invariably blends well with its surroundings. Economic conditions nowadays unfortunately tend in the other direction, and lead those who are not suitably warned against the possible dire results of such action to obtain their materials from foreign countries, or at all events from far afield, and they may produce a colour which is extremely discordant with the landscape in which the building is placed.

I should like to give you an example of that. For a good many years now I have been one of the Forestry

Commissioners, and one of our tasks is to create a considerable number of what we call forest workers' holdings, which house the people who work for us in the winter and on their holdings when we do not want them. A former Assistant Commissioner for England and Wales, who was our chief executive officer, took infinite trouble and obtained admirable advice, and achieved a group of forest workers' holdings of warm reds which blended admirably with a pleasant, rich landscape of greens. He was so much struck by the general praise which his efforts evoked, however, that he decided to standardise this type, and the next group were put on the high grey slopes of Upper Dovedale—and the whole neighbourhood went up in wrath! I give that merely as an illustration of the importance of using local material, which is almost certain to blend with the landscape in which it is placed.

There is one little point, and one only, on which I am inclined to disagree with Mr. Gunn: I think that he was rather severe on the rural architect. My experience of recent years is that the rural architect is producing admirable work. I think that the design of many houses, large and small, which have been built in the countryside during the last few years is quite admirable; and there is one particular class of house which I think illustrates this more than any other. There is, as you all know, a very big movement now for the rebuilding and improvement of public houses, and as I go about the country I have been immensely struck by the work of local architects in this direction. Some quite charming country inns are being produced which help to make the inn what it ought to be, an important feature of our local social life.

Mr. Gunn refers to the people who resent any building where none stood before. I have a good deal of sympathy with him there. Day by day and week by week my colleagues on the Forestry Commission and I suffer from the very keen and sincere individual who thinks forestry a splendid thing and says "Plant trees anywhere and everywhere but here." It is only human nature, and I do not really regret that point of view, and I do not think that Mr. Gunn should regret it either; because, after all, local opposition is a stimulus to effort; it produces in most of us—though not, I am afraid, in all—a desire to please local public opinion as well as to satisfy the economic or other needs of our immediate client. I think that that stimulus to effort is also a step to the achievement which must appeal not only to the forester but also to the members of your great profession.

Mr. LESLIE S. WOOD (President of the Land Agents' Society): I have to thank you for so very kindly asking me to second this vote of thanks, which I do with great pleasure, as representing the land agents of this country. I think that all of you, like myself, must enjoy hearing a man open his heart on a subject which is really very near to us, and especially to all of us who practise in the country and who wonder what the conditions are with which other people have to contend. I can see that there is much in common between us and the architects who practise in rural England, and my sympathy goes out to Mr. Gunn and to all of you who practise in the country, knowing so well the conditions of life there.

Looking back over the last twenty-five years, it seems to me that in literature and art, and also to a large extent in architecture, men and women who have had ambitions to make a name for themselves and to be considered clever—and, after all, to be considered clever is one of the things which make the wheels go round and bring in the money—have tended to try to be original, and in doing so, as some of them would say, to stamp their work with their own individuality. Although that may be very well, and perhaps is the right thing and may be accepted by those who practise in the cities and the large towns, I am not sure that it is really a proper method of approach when one lives in rural districts.

Harmony, as no doubt many of you realise, is the very essence of country life. Harmony comes into every branch of our life, our social work as well as our professional life; and no one knows better than Sir George Courthope what I mean when I say that harmony between all social classes in rural England largely makes it the pleasant place that it is. Now, just as harmony comes into our rural and social life in that way, so it comes into our architecture; and, although it may be a very worthy thing for a man to stamp his work with his individuality, individuality in the countryside does not count for quite so much as it does in the town, and individuality must always be modulated by the fact that the work which a man does, to be successful, must harmonise with its surroundings.

Sir George Courthope has already mentioned how in the past the work of architects and builders has harmonised with the district, partly, perhaps, because they were used to it. There has always been a gradual development; the development from one period to another has seemed to a large extent, though not absolutely, to follow as a sort of natural consequence, especially amongst the smaller houses of the district, which, after all, largely make up the beauty of the country. We in this country have never been revolutionary; we have always been constitutional. To my mind, we never ought to be revolutionary in the countryside; we should always be constitutional, and carry on as far as possible the methods and traditions of the past. Unless a man who comes into the country to practise is prepared to accept that principle I do not think that he will succeed. He is going to be unpopular in the district in which he settles, and, what is more, he is very apt to make his client unpopular, and to put up a property which will depreciate in

value from the very day it goes up on its site. That is something always to be remembered. In the countryside to-day houses and other buildings are being put up which cannot, and never will, harmonise with their surroundings. I ask all of you who practise in rural areas to bear that in mind. Seek your individuality in the ideal of bringing into your work the harmony and the beauty which you see around you. These are just the ideas of a land agent who sees the beauty of the country from day to day ; it will be very interesting to hear what others have to say.

I was a member of the urban district council of my town for many years. We were sometimes faced with plans which were not at all in keeping with the beauty of an old town, and we have said, " We cannot pass this "—I am sorry to speak disrespectfully of anybody's plans !—and then someone has said, " It is by a very good architect. Your trouble is that you are not keeping pace with the times, and in twenty-five years' time what you are now disparaging will be the general architecture of the countryside and of this country." Well, it may be so ; I may be wrong ; but I still hold to my view that the real beauty of architecture is found when it harmonises with its surroundings, and the successful architect is the man who can make it do so.

I should like once more to congratulate Mr. Gunn on this really delightful paper, which I am sure will afford you ample opportunity to think out what is a very great problem.

Mr. H. P. G. MAULE [*F.*] : I should like to congratulate my friend Mr. Gunn on the excellent paper which he has read to us to-night. I should also like to tell a little story about the difficulties of getting the country builder in the old days to quote on quantities. A great many years ago there was a little builder in the country who used to build small farmhouses for me, and they usually came out at between £500 and £600. One day, being very young and thinking myself very clever, I thought that it would be a good thing to have quantities taken out, and so quantities were taken out, and in due course they were sent to my friend, and the price came out at about £750. I went to see him, and he had a very keen twinkle in his eye as he looked at me and then at the plans ; then he took a two-foot rule from his pocket and said, " Look 'ee here, I know I can build them cheaper than that. You let I take these plans and give 'ee a price of five hundred pounds."

Mr. J. W. ROBERTSON SCOTT (Editor and Governing Director of the *Countryman*) : As a countryman, I should like to thank Mr. Gunn for his very interesting paper, which shows that he really does know something about the country. What one has often felt about some of the work of architects who have worked in the country is that it might have been better if they had started by being countrymen. The hope for architecture in the country, of course, is in the large number of people who have reasonable means and who have never yet met an architect, and certainly have never employed one ; and the number of those people is, I think, much larger than is generally understood.

After fourteen years on the housing committee of a rural district council which has built more than three hundred cottages, I feel that what is chiefly wrong about some of the building which has been done is that the architects have not been paid sufficiently well. In regard to this rural district council work architects cannot really do themselves justice on the fees which they have sometimes to accept. Of course, as those of us who have served on rural district councils know, it is sometimes extremely difficult to persuade them to give up having their cottages built by the sanitary inspector ; but, after a few years' hard struggle, many councils have appointed architects. I have often been sorry for these men. They are extremely devoted to their work ; they want to do the best they can ; and, first and last, they have to do a great deal and give a great deal of time for which they are not paid. If some way could be found of more worthily remunerating the architects who are working in the country, I think it would be well.

I should like to say how much I have enjoyed listening to Mr. Gunn's paper ; it is a real breath from the country which he has given us. I should like to add what a satisfaction it is to those of us who live in the country that so many rural district councils have now at last been prevailed upon to employ architects, and, as many of you probably know, the Minister of Health has appointed a Housing Advisory Committee which already has two sub-committees, and I think that there is going to be from the Ministry of Health a more helpful relationship with the rural district councils than has perhaps always existed in the past. I can well remember the time when we used to have to struggle against the Local Government Board, as it was then, when it was insisting on forcing urban building bye-laws on rural districts. I feel that at the Ministry there is now a disposition to listen to rural experience, and that it is the fault of those of us who live in the country if we do not take full advantage of the opportunity to make our views and our experience tell.

I thank you again for giving me the opportunity of listening to this interesting paper.

Mr. H. L. CREAK [*Student*] : As one of the younger members of the profession I should like to thank Mr. Gunn for his most interesting paper. It is encouraging to set eyes on a man whose books one has read. I have been closely associated recently with putting up property in the country, and, with regard to the question of price, I feel that if town architects are called in to give a price for the services which are referred to in the paper they will be badly let down if they resort only to the method of cube. I speak from experience, and I would say that it is only safe to include in the cube price drainage within 20 feet of the boundary of the house itself ; the rest of the drains and services should be put down as extras ; otherwise you will find that you will have a battle with your client, which I do not think that you will win.

Mr. HAROLD V. RAFFETY, C.B.E. (Chief Land Commissioner, Ministry of Agriculture) : I should like to be allowed to add a few words of thanks to my old friend Edwin Gunn for his paper, and especially because it is an outstanding example of the qualities which I have always found in him, and I have known him for a great many years. There are two things which he always does : he always grips a subject very quickly, getting all the local colour and getting to know all about it much quicker than the average person, and secondly, he has a very delightful and happy way of explaining to the layman the technicalities of architecture, a thing which very few people can do. You will, I hope,

see the point of my remarks when you consider the title of this paper—" Problems of a Rural Practice "—and not only problems but their solution. I thought to myself when I saw that, " How long is it since this man was closely allied with me at the Ministry of Agriculture day by day, and how long has he been tackling these problems of a rural architect? " and I realised that it was quite a short number of years. When he was with us he quickly acquired the local colour, and was half a farmer as well as an architect ; he knew as much about the land as we did, who were supposed to know all about it, and at the same time he was able to explain to us poor laymen the architectural side, and so everything went very smoothly. I am therefore very struck by the fact that having left us he is able, after a short time in the country, to come and tell you all about the problems of a rural architect and their solution, in terms which I as a layman can understand.

Mr. H. E. AYRIS [*L.*] : I should like to ask whether the problem of the rural architect is not really that of trying to find out a way of life which adapts itself to the local conditions. I am inclined to think that we as architects have fixed our minds on the problem of how to adapt the country to the needs of the townsman, the man who comes from a London practice or who has followed London doings and who finds himself in a " godforsaken part of the country," and tells the countryman ho to do things. My home, The Cottage in the Wood, within sight of the fells, teaches me to suggest a somewhat different point of view.

I think that in a rural practice we should address ourselves to the problem of adaptation to the natural conditions. I did not hear from Mr. Gunn, for example, anything about the utilisation of rainwater—a gift of nature. I hear that the rainwater which we store at The Cottage is greatly appreciated by some of our lady visitors ; it is said to be so good for the hair ! We have a shallow well which is liable to contamination, but we do *not* contaminate it, and the water from it is considered by children in the summer to be equal to ice-cream, it is so cold ! Refrigerators, of course, we do not have ; we merely put the stuff in a bucket and put it down the well ! Public services we do not enjoy at all. I find that a candle provides an excellent light by which to read in bed, but when I see electricians in town and discuss lighting problems with them, they scarcely know what a candle is. They tell me that they have 100 candle-power lamps in their back kitchens ! I hope it may be remembered in my favour that I have one candle-power and find it sufficient. I am wandering from the point, sir. My question is whether the finding of a simple way of life based upon the utilisation of natural resources is not the real problem of the rural practitioner.

Sir JOHN RUSSELL, O.B.E., D.Sc., F.R.S. (Director of the Rothamsted Experimental Station) : May I say a word of thanks to the Council of the Institute for their invitation this evening, first to meet them at a delightful dinner and then to listen to this interesting paper by Mr. Gunn ?

It is universally admitted that one of our great problems to-day is to improve the conditions of life in the country, and one of the most important ways of doing that is to try to bring back some of the beauty of the villages which was created by the craftsmen of old. A beginning has already been made. Thanks to a great deal of thought given to the subject by architects, the problem of the design of the rural cottage is now very largely solved ; modern cottages designed by architects are well suited for their purpose and pleasant to look upon. One very important problem, however, has not yet been solved, and that is the problem of the farm buildings.

The old craftsmen had solved it for their conditions. At Rothamsted we have an effective set of fairly recent farm buildings, but sometimes when the day's work is done I walk to the edge of our farm and look at the valley below, where there is a set of farm buildings put up in the eighteenth century, good in proportion and colour, harmonising with their surroundings, completely satisfying to look upon ; and I fear that no one looking upon our farm buildings in a hundred years' time, if they last so long, can possibly have the same feeling of satisfaction as I have in looking upon the work of those old craftsmen who put their buildings up more than a hundred years ago.

Something has been done, however, to improve the farm buildings of to-day. Professor Richardson a little while ago set the design of farm buildings as a diploma subject for his students : an example that I wish many more schools would follow. Two or three years ago at Rothamsted we had occasion to extend our buildings, and we consulted Sir Walter Tapper, who gave us a good design, which harmonises well with the surroundings, concordant, entirely unobtrusive and satisfying to look upon from whatever part of the farm the buildings are seen. It cost us more than if the local builder had done it, but not a great deal more, and the buildings were better for our purpose, they will last longer, so that there is less charge for depreciation, and they will always be a satisfaction to whoever looks at them. They have, however, some special features to fit them for our experimental work which justified a higher expenditure. The ordinary farm buildings, on the other hand, are used solely for the ordinary purposes of the farm, for which we cannot afford to pay more than a certain amount.

Firms who deal in standardised buildings are already in the field, and they will supply sectional buildings which can be used as pigsties, cowsheds or whatever may be wanted at so much a foot run. We know fairly well how much we can afford to pay per head for housing our livestock ; for our pig population, for example, we can pay £5 per pig, and standardised structures can be obtained at that price. Recently I wanted to put up some piggeries that would harmonise with Sir Walter Tapper's design, and unfortunately the cost worked out at £9 per pig. In this misguided country there is no housing subsidy for pigs—I hope Sir George Courthope will take note of that !—and we have this awkward discrepancy between the £5 which we can afford to pay and at which the makers of standardised buildings will supply them, and the £9 which it will cost us if we are to put up buildings in harmony with their surroundings.

I do hope that country architects will turn their attention to farm buildings, as they have so successfully done to farm cottages, so as to find some way of bridging the gap between the £5 and the £9. It is not necessary to get down to £5, because one is prepared to pay something more for the better structure that an architect will provide, and something more also for the amenity value of a decent building ; but at the moment the gap is too big. It is necessary that the buildings be hygienic, easily workable, made of materials that harmonise with the surroundings, and, above all, of good proportions, so that when you look at the farm buildings you will not feel that they are a jumble of sheds and ramshackle structures, but that there is a satisfying unity about them, so that you can look on them with pleasure and hand them down to your successors with pride. The architects of this country have been so successful with their town buildings and country

houses that I feel certain they could be equally successful with the problem of farm buildings, so restoring something of the beauty and harmony which the old craftsmen succeeded in giving to the villages of the days gone by.

Mr. J. E. HAMMOND: Mr. Gunn, in his wonderful paper, has suggested that tradition has gone out of the country. So far as architects are concerned, I think that tradition has gone on there, and in a country practice where the father is an architect he will often send his son to the builder for two or three years to gain practical knowledge. That was my own experience, and I know two or three other people in similar positions who have gained their practical knowledge from the builder in that way.

Mr. A. EWART ASTON [*L.*]: I should like to point out an omission—I am sure unintentional—from the paper, and that is the lack of reference to the country craftsman. Some of the finest craftsmen I have ever met are country craftsmen. Whether the material is stone or brick or, better still, timber, I find that one can get the best craftsmen in the country, men who know their work, whether it is a case of alterations to old buildings or of building new buildings in the country style; they are far better than town builders or suburban builders. I have had to deal with rural buildings in the neighbourhood of towns where I have had to go to a town builder for them, and I have had nothing like the craftsmanship which I have obtained from the real old country builder, whose experience is passed down from father to son and extends to dealing with old country houses, the repair of churches and some of the finest of the older buildings. Moreover, if the countryman is a local man he simply cannot do a bad job, for his neighbours will pull his leg unmercifully if he does!

Mr. A. H. ARCHARD [*L.*]: Mr. Gunn refers at the beginning of his paper to ignorance of the status of the architect, and I should like to say a word on that point. It seems to me that whether one practises in the town or the country one of the big difficulties is the average layman's ignorance of the duties of an architect. Recently, being commissioned to prepare plans for a house, at the opportune moment I presented the scale of charges to the client, who placed it in his pocket with no comment, but shortly afterwards I received a letter asking me whether I really considered that he was going to waste his time by reading such a lengthy booklet. I had placed a great deal of hope in his perusing it, so that he might be acquainted with at least the elements of the procedure which was about to begin; but apparently he is only one of many who will not even take the trouble to read the short statement which is contained there.

If some means could be devised to enlighten the general public on what an architect is supposed to do for his fee it seems to me that a difficulty which often arises between architects and their clients could be eliminated. Most people know what they look for from their doctor, their dentist and so on, but they do not appear in many cases to have the faintest knowledge of what an architect has to do. As a matter of fact, the gentleman to whom I have referred called to see me at three o'clock this afternoon and asked me whether I could get out sketch plans and elevations and sections by five o'clock, as he was catching the 5.15! It is amazing that a man in his position should make such a ridiculous request. If the Council could devise some way of giving publicity to this aspect of the matter it would do a great deal of good. I do not know how it could be done—perhaps it could be done through the Press—but in some way or other the public should be informed what it is that architects are supposed to do.

Mr. T. LAWRENCE DALE [*F.*]: I should like to be allowed to support the vote of thanks to Mr. Gunn, if only because I am a very old friend of his. I always think that Mr. Gunn is one of those "little things that matter!" The country architect is really of far greater importance than the town architect, because the country architect can improve or destroy a whole landscape of twenty miles in extent, whereas the town architect can improve or destroy only the aspect of a street.

I was very much impressed by the kind words said by Mr. Robertson Scott with regard to the remuneration of architects. The trouble with all this country work, of course, is that it has to be done on the basis of £5 per pig; and if you work out a scheme on the basis of £5 per pig your remuneration is very low indeed. With our scale of fees the cheaper the class of work that you are doing the less you are paid for it, whereas the amount of work involved is often much greater than with more expensive jobs.

I have great sympathy with Mr. Leslie Wood, who spoke of the harmony with the countryside which should be preserved, but I do feel we should realise that traditional work was once modern. It is a mistake to require that architects should imitate traditional work in order to harmonise with the countryside. If that attitude is adopted generally by local authorities it will, I feel, result in stultifying creative work of very great importance.

Mr. GILBERT H. JENKINS [*F.*]: As a town architect I had not intended to speak, but I have some small qualification to do so as I was articled in the country; and, as an old friend of Mr. Gunn and of Mr. Dale, I should not like what Mr. Dale has just said to be misunderstood. I do not think that any architect does allow the question of the cost to affect him in the sense that he does not try to give his client the best results for the least possible money. The trouble is that Sir John Russell goes to a mass-production firm; it is impossible to design things specially to look their best in competition with this mass production, obviously the specially made things must cost more money.

The trouble which I found, as pupil to a country architect, was that there was not sufficient work for the country architect to be an architect all the time; he has to take up all sorts of sidelines in order to augment his income. It seems to me that that is a very great difficulty.

With regard to local authorities, there is no doubt that it would be a very great advantage to England if they employed architects to a greater extent. I had to do with some beautiful old almshouses at Shrivenham, stone cottages with stone slate roofs, and it was proposed to pull down half of them and put up new cottages in brick with bay windows and tile roofs, simply because the cottages had not damp-proof courses. When built the cottages had undoubtedly been perfectly dry, but owing to the way in which they had been treated and neglected they were certainly damp. It does seem a pity, however, that local authorities should not call in a really experienced local architect who could advise them how these beautiful old cottages could be saved. That is the sort of thing which is going on all over the country.

Mr. MICHAEL TAPPER [*F.*]: I think that I must join in this discussion about pigs, because Sir John Russell and I

were together in this matter, and I should like to say that Sir John's pigs are not like the ordinary pigs that most of us know ; they are super-pigs ; I am not sure that he does not have them brushed and titivated up every morning ! It is a longish time ago since this question of the housing of pigs came up, but I remember and should like to make it clear that it was not a question of an ordinary series of pigsties ; they were super-pigsties, especially hygienic, with special feeding rooms and so on, so that this £5 and £9 assumes a very different aspect when you get down to designing on Sir John's lines for his super-pigs.

I should like to thank Mr. Gunn for his very interesting paper.

Mr. LEONARD ELMHIRST, M.A., B.Sc. (Trustee, Dartington Hall Trust) : I should like to thank Mr. Gunn very much for his paper, and I should also like to ask him one question. I live and work in a rural area, and I find that with other professions in the countryside, though not yet with architects, there is beginning to be recognised a degree of specialisation as well as a continuation of what I would call general practice. I wonder whether Mr. Gunn can foresee a time when there may be panels of architects or even groups of architects for a region of some size in a rural area. The example which I can give is not in the field of architecture, but there is a certain firm of dentists in my neighbourhood which now includes a group of specialists as well as a small group of general practitioners. There is a specialist, for instance, who actually extracts teeth, while the other men do the other kinds of work.

Many of our difficulties in the work in which I have been engaged are due to the fact that some of the architects with whom we have had to deal have regarded themselves as able to do anything that came within the ordinary term "architecture," and quite a number of the jobs which we offered them were really highly specialised jobs. If, for example, in, say, a third of the rather big county in which I live there was a man who really did specialise in the needs of the pig, the £5 pig, I believe that such a man, if he had a good knowledge of local materials, could get down to very near the price of the mass-produced article, because although the mass-producing man can ship something in to the area, there are other things which are nearly always needed besides what he ships in, and a man who knew the local conditions and materials and made a careful study of the problem could often do a special job. Whether it is pigsties or cow-sheds or a rural factory or a kitchen for a country cottage or landscape architecting or civic and town planning, the work of the specialist could be invaluable. How desperately we have looked for an architect who really could plan a kitchen ! He would do a beautiful façade, and he would even make it rustic, but it is difficult to get him really to think out and plan a kitchen, as a workshop.

I simply throw this out as a suggestion to Mr. Gunn. If we could have a panel of architects, some of whom would be specialists, serving a certain region, I think it would be possible for rural district councils, county councils and estate owners to keep them well supplied with work, because they are all beginning to want these specialist services and finding it very difficult to obtain them. I may be crying for the moon, but I put this suggestion forward in the form of a question, as to whether Mr. Gunn thinks it possible.

Mr. H. LIDBETTER [*F.*] : I have narrowly escaped the awful fate which Mr. Gunn has described to us this evening. I should like to emphasise one point, and that is the use of local materials. I once heard it said that the most depressing sight in the country was the delivery of the first load of bricks in a nice green field ; but if those bricks come from a neighbouring brick kiln, and the rest of the materials are also from the district, some of the horror engendered by the delivery of bricks from a large brickfield in the Midlands of which we all know will be avoided.

Mr. EDWIN GUNN (in reply) : We have had a most interesting discussion—at any rate it has interested me immensely—and perhaps I may be permitted to take up a little more of your time by traversing briefly some of the points which have been raised.

I thoroughly agree with everything that Sir George Courthope was good enough to say in the kind remarks which he made in proposing the vote of thanks. We all, of course, desire to use local materials whenever we can, but it is not always easy, as he no doubt realises. In the district in which I am now resident and with which I am most familiar, a most peculiar train of events took place, which does not seem to me capable of explanation on any economic grounds whatever. At one time the common material in use in that district was stone, which is plentiful ; it is about ten inches under the surface almost anywhere that you open the ground. At the time when stone was the staple material, buildings were not unduly expensive ; the cost was not above the general average. About thirty years ago, however, a commencement was made with making bricks in that district. Bricks, of course, are much easier to use than stone ; it is possible to use an 11-inch wall instead of an 18-inch wall to keep the wet out, and the size of the plan of the house shrinks proportionately by the reduced amount of wall, and incidentally the roof and foundations shrink also. Buildings, however, did not become any cheaper ; they remained about the same price that they had always been, but concurrently the price of the stone building bounded up by about 20 per cent., and stone is now a luxury. It is still there in just as ample quantity as ever. That situation seems to me capable of no economic explanation whatever.

Sir George Courthope mentioned the very great importance of colour, and particularly in hilly districts the colour of a building, and especially the colour of the roof, seems to me very important. A scarlet roof with those shiny tiles which never weather can affront thirty miles of countryside, and it is totally unnecessary in these days to have recourse to materials of that kind ; it is merely ignorance that anything else is available.

On the question of building where there has been no building previously, there was a letter in the *Daily Telegraph* this morning protesting against the fact that

someone is going to build a house in the Darent Valley. Really, to my way of thinking it is not so dreadful that a house is going to be built there if it is a good house, though if it is a bad house it is deplorable ; but the outside public—perhaps it is a case of having frequently been bitten !—seem to expect a bad house as a matter of course if it is a modern house. It is very unfortunate.

Again, I was in complete sympathy with the remarks of Mr. Leslie Wood on the value of harmony. Mr. Robertson Scott, the editor of *The Countryman*, put this question most effectively in the pages of *The Countryman* some time ago, in this form : " What would you do if you had to build in Chipping Campden ? "—and there you are !

Mr. Robertson Scott also mentioned the question of the employment of sanitary surveyors to make plans. That is a rather more serious matter, even from the local government point of view, than commonly appears, and it is not unknown for the proper work of a sanitary inspector to be held up because he is engaged in supervising the erection of houses or other buildings.* Local authorities sometimes treat their sanitary surveyor in such a way that the poor fellow is compelled to undertake outside work ; they use him in very much the way that the (probably mythical) commercial traveller is alleged to have used the brush which he carried in his luggage—one end for hair and boots, and the other end for teeth, nails and dusting.

I am enormously grateful to Mr. Raffety for the very kind remarks which he made, which were quite undeserved, about my supposed knowledge of subjects which are a little outside architecture. Although I believe his remarks to be exaggerated, I am duly grateful.

Mr. Ayris, who comes from Cumberland, mentioned several points with which I have a good deal of sympathy. I find that my clients all want electric light rather than candles, however remote they may be in the country. As to rainwater, that problem does not arise in my district, because it is possible to obtain perfectly good soft water everywhere, without bothering about saving rainwater, and there is any amount of it.

Sir John Russell referred to farm buildings. I have had a good deal of contact with farmers. The first fact about them, which is heavily borne in on me, is that they have not any money. The second fact is that they cannot understand plans, and the third fact is that they will not realise that things which are commonplaces to them are not necessarily known to an architect. They neglect to tell him all sorts of things which they think that everybody knows, and, not understanding plans, they do not realise that something awfully wrong is being done until it has actually happened, which is a great drawback in working for farmers—or at least it has been so in my case.

Of course, eighteenth-century farm buildings are beautiful and satisfactory to the eye, while modern farm buildings, at any rate in this country, are generally flimsy and hideous ; but they are not necessarily flimsy and hideous. They are not as a rule flimsy and hideous in Denmark and Sweden, and the only explanation that I can think of is that in Denmark and Sweden architects are apparently commonly employed for farm buildings, whereas in this country they are not. I will not refer to the £5 per pig, but with regard to cowhouses, when I first started taking an interest in farm buildings it was reckoned that £20 per cow was about the price which had to be paid for a cowhouse. I have recently, however, got down to housing 18 cows for £200, in conditions which will comply with the accredited milk scheme, and I thought that perhaps I had done something rather noteworthy. This cowhouse was illustrated in the *Farmer and Stockbreeder*, and the immediate consequence was a letter from one of the firms who supply ready-made cowhouses saying that it could not be done. My answer is that it has been done.

Mr. Aston accused me of leaving out any reference to craftsmen. Perhaps I should plead guilty, but I did by inference mention them when I spoke of the country builder who always tried to keep a hospital job going in order to keep his key men employed when he had not other work on which to put them. I thoroughly agree with Mr. Aston that the country craftsmen are really admirable when you have, for example, an old-established firm of builders going on from father to son and going right back almost to the Middle Ages ; you there obtain the highest level of craftsmanship obtainable anywhere.

Mr. Elmhirst referred to specialists and panels of architects. In theory that is no doubt a very good idea, but I opened my paper by saying that the chief problem of a rural practice was to obtain worth-while work, and I cannot see how such a panel system as is proposed will make things any easier for the architect. It may be nicer for the client if he can go to a firm which contains one man who can build factories and another man who can build kitchens, though I believe that most architects can do that if they tried hard enough. Something of the sort might be possible, but it requires thinking over ; it is rather a poser to have put to one without notice.

With Mr. Lidbetter's remarks on local materials I think that every architect will agree, but not every architect can comply with them.

In conclusion, I should like to thank you for your most patient and appreciative hearing, and for the very excellent discussion which has followed my humble paper.

* Mr. Gunn did not say this in these actual words, but he mentioned a number of instances which he asked should not be reported.

THE SOUND-INSULATION OF PARTITIONS

By J. E. R. CONSTABLE, M.A., Ph.D., B.Sc., and C. J. MORREAU, M.A., A.R.I.B.A., A.M.I.Struct.E.

In a recent paper read by one of us before the Institute,* an account was given of the ways in which noise may be generated in a building and certain general methods of minimising the annoyance arising from it were discussed. It is proposed in this article to go rather more deeply than was possible in the above-mentioned paper into one aspect of this problem, namely, the erection of sound-insulating partitions.

RECENT MEASUREMENTS

In a paper recently published by Constable and Aston† the measurements made at the National Physical Laboratory of the sound-insulation of about 90 partitions are collected. Many of these measurements were made on behalf of various firms and from this point of view alone are of interest to the architect as they apply to most of the partitions commonly used to-day. The figures are accordingly reproduced (See Tables 1 and 2) by kind permission of the publishers of the *Philosophical Magazine* and of the firms concerned. These figures were obtained from measurements upon specimen partitions having over-all dimensions of about 5 feet by 4 feet, and using an oblique beam of sound directed towards the test partition. Most standardising laboratories use variations of this technique and their results are, therefore, not necessarily directly inter-comparable.

In the first column of Tables 1 and 2 is given a brief description of the construction of the partition ; in the second and third columns are the weight in pounds per square foot and the thickness respectively. The other columns give the sound-reduction factor in decibels averaged for the frequencies specified, the figures in brackets giving the sound-reduction factor to be expected for an average single homogeneous partition of the same weight. (The significance of this figure is explained later.) The last column contains a sound-reduction factor obtained by averaging the results for all the test frequencies. It will be noticed that the partitions are collected into two groups, viz., single partitions (Table 1) and complex partitions (Table 2). The first group includes single sheets, solid panels constructed from one material and single walls of bricks or building blocks (plastered or unplastered). This group is further sub-divided into single homogeneous partitions such as building board, glass and solid brick walls, and single inhomogeneous partitions such as walls of hollow tiles. Partitions other than single partitions are termed complex.

The above classification is somewhat arbitrary but it is convenient and is based upon the fact that when sound falls upon a single homogeneous partition the vibrations of the surface upon which it falls are transmitted directly to the other surface, whereas in the case of complex partitions the vibrations have to pass through some intermediate material, e.g., air, cork or felt.

Measurements made at the National Physical Laboratory and elsewhere have shown that there is a very close correlation between the sound-reduction factor of single homogeneous partitions of widely varying material and their weight per square foot. The correlation is exhibited in the curves shown in Figs. 1-4, which are based on the results in Table 1A. Figs. 1-3 were obtained by averaging results for the following groups of test frequencies—200 and 300 ; 500, 700 and 1000 ; 1600 and 2000 cycles per second. Fig. 4 was obtained by averaging results for all the seven frequencies.

The curves may be regarded as representing the sound-reduction factor which the average single homogeneous partition of a given weight may be expected to have when tested under the conditions of these measurements. They are also very useful in assessing the effectiveness of any partition construction, for a complex type of partition is of special value for sound-insulation only in so far as it has an insulation appreciably greater than that of the average single homogeneous partition of the same weight.

As shown by the scatter of the points through which the curves are drawn, single homogeneous partitions may be expected to show divergences of up to 2 or 3 decibels from the curves. The

* C. J. Morreau, R.I.B.A.J., 45, p. 117, 1937.

† J. E. R. Constable and G. H. Aston, *Phil.Mag.*, 23, p. 161, 1937.

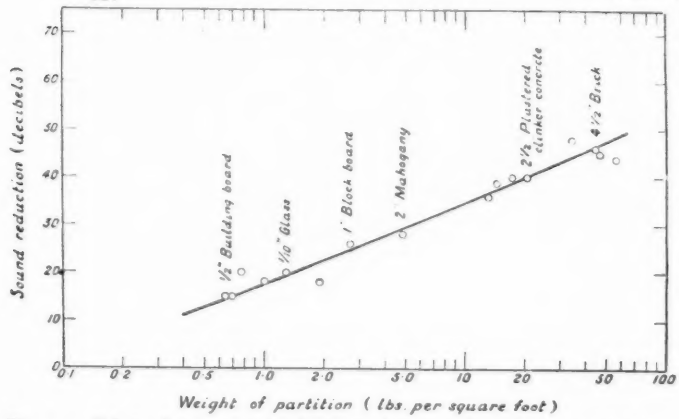


Fig. 1. Relation between sound reduction in decibels and weight per square foot of single homogeneous partitions. Sound reduction averaged for frequencies 200 and 300 cycles per second

Fig. 2. Relation between sound reduction in decibels and weight per square foot of single homogeneous partitions. Sound reduction averaged for frequencies 500, 700 & 1000 cycles per second

divergences are probably mainly due to resonances of the partitions tested, but are not of serious consequence to the architect since differences of a few decibels (say up to 5) have little practical significance.

The following general conclusions can be drawn from the results given in the Table.

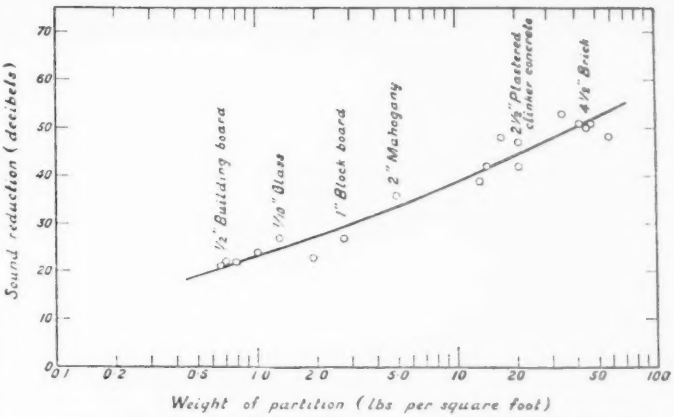
1. If the measured sound-reduction factors for single homogeneous partitions are compared with the figures (given in brackets) for an average single homogeneous partition of the same weight it will be noticed that the differences which occur are only slight and not of practical significance. Therefore the curves of Figs. 1-4 may be used to predict the insulating value of any single homogeneous partition irrespective of the material of which it is constructed.

2. The measured figures for single inhomogeneous partitions show equally small differences from the figures for average homogeneous partitions of the same weight. The curves of Figs. 1-4 may therefore be used to predict also the insulating value of single inhomogeneous partitions. The only systematic difference observable between the behaviour of single homogeneous and single inhomogeneous partitions is a tendency for the results for hollow blocks to be somewhat below the curve for high frequencies. It appears that the air spaces contained in hollow blocks are of no acoustical value for insulating against air-borne sound, the only effect being a loss of insulation corresponding to the reduction in weight.

3. Results for a number of stud partitions are given in Table 2 and it will be noticed that the sound-reduction factor of these partitions is almost invariably well above that of a single homogeneous partition of the same weight.

4. The results for the double windows, Nos. 45-55* illustrate the effect of varying the spacing between two sheets of glass. In general the insulation increases with the spacing, but below a certain spacing for which the insulation is a minimum the reverse occurs. This effect is of importance chiefly at the lower frequencies,

* See J. E. R. Constable, *Phil. Mag.*, 18, p. 321, 1934



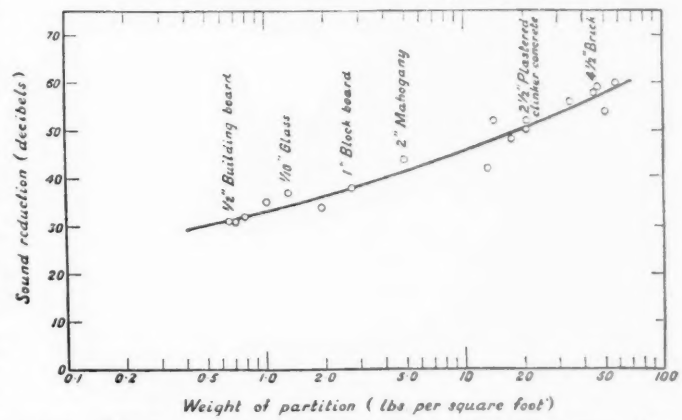


Fig. 3. Relation between sound reduction in decibels and weight per square foot of single homogeneous partitions. Sound reduction averaged for frequencies 1600 and 2000 cycles per second

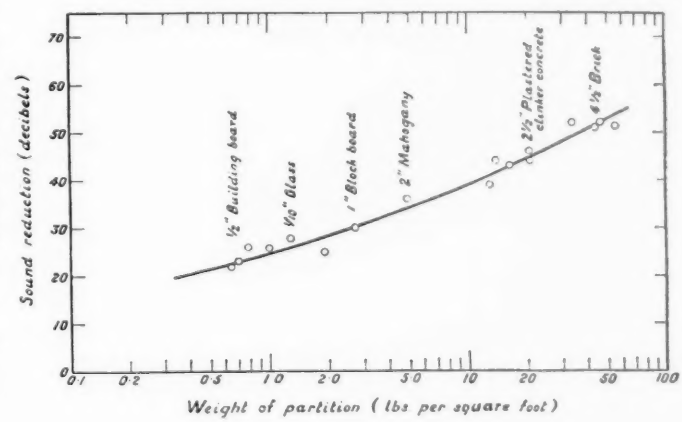


Fig. 4. Relation between sound reduction in decibels and weight per square foot of single homogeneous partitions. Sound reduction averaged for frequencies 200, 300, 500, 700, 1000, 1600 and 2000 cycles per second

since the critical spacing is very small at high frequencies. The minimum in the insulation is due to resonance, but is avoided at all frequencies when 21 oz. or heavier glass is used if the spacing exceeds 4 ins. It may be mentioned in this connection that the sound-reduction factor of a double partition having flexible walls (e.g., a double window) depends upon the amount of sound-absorbent material in its interior. Thus the sound-reduction factor of a double window, which normally contains little sound-absorbent material in its interspace, can be considerably increased by lining the enclosed walls with an acoustic felt.*

APPLICATION OF LABORATORY RESULTS

These results cannot be immediately applied in practice without discussion.

Two points will be dealt with at some length : (1) the extent to which results obtained in laboratory measurements can be reproduced in actual buildings where other factors are at work ; (2) the choice of partition to suit given noise conditions.

1. Factors Affecting Effective Sound-Insulation of Walls

Provided that the wall is properly constructed, the sound-insulation obtainable, in practice, from a partition depends not only upon the sound-reduction factor of the partition but also upon the amount of acoustic absorbent material in the rooms and the sound-transmitting properties of the flanking walls and floors. The effective sound-insulation is decreased if the rooms concerned are too reverberant. It appears to be possible to lose up to 10 db. of insulation on account of lack of absorption in the room. Such a loss is exceptional, but 5 db. is quite probable. As a rough rule it may be taken that for rooms of average size, provided the reverberation period is not more than about one second, the insulation obtainable should be about the same as the figure obtained in the laboratory for the sound-reduction factor, always providing, of course, that there is no other factor affecting the insulation.

Another important factor which often influences the effective sound-insulation is, as mentioned, the transmission along the flanking walls and floors. This has not yet been fully investigated. The indications are, however, that as a general rule it is useless to erect a partition having a greater insulation than that of the flanking walls and floors. In practice this may mean that there is little hope of obtaining better insulation than that provided by a 9-inch brick partition unless some means of preventing sound transmission along the flanking walls and floor is adopted. Methods of achieving this have yet to be developed. The possibility of using a discontinuous construction for the flanking walls and floor is being investigated in a specially designed building at the Building Research Station.†

* See J. E. R. Constable, Proc. Phys. Soc., 48, p. 690, 1936.

† Report of Building Research Board (1936, p. 43).

2. Choice of Partition

The discussion has so far referred only to the intensity of sound and the term sound-insulation has meant only differences in intensity of sounds of similar character. Intensity is a measure of the energy contained in the aerial sound wave. The architect is more directly concerned with the sensation of loudness experienced by the ear when stimulated by the aerial wave. Loudness and intensity are not similar quantities, for the ear reacts differently to sound waves containing the same energy but differing in pitch. In selecting a partition the choice must be governed by considerations of the reduction in loudness rather than the reduction in intensity which the partition will afford.

The determination of the loudness of a noise has become possible only in recent years, the great interest in the problem having stimulated considerable research into its intricacies. Two methods of measurement are in common use to-day, viz., the subjective and the objective methods. These are exactly analogous to the methods commonly used for determining the candle-power of lamps. The subjective method, in which the loudness is assessed by determining the intensity of a standard 1000 cycles note which appears to the ear to be as loud as the noise in question, is analogous to determining the number of standard candles necessary to provide the same illumination as the lamp under study. The objective method, in which the noise is picked up by a microphone, the output of which is determined by the aid of a valve amplifier specially made to simulate the characteristics of the human ear, is analogous to the photometers which employ photo-electric cells with colour filters to simulate the characteristics of the eye. Just as, in photometry, we endeavour to express the illumination obtainable from a lamp (whatever its colour) in terms of the illumination from a lamp of standard colour, so do we express the loudness of a noise (whatever its frequency or composition) in terms of the loudness of a noise of standard frequency. Corresponding to the accepted unit of illumination, viz., the foot-candle, there has been adopted a unit of noise termed the phon.

For a full definition of the phon readers are referred to the *British Standard Glossary of Acoustical Terms and Definitions* (No 661-1936). The phon scale is actually related to the decibel scale in the following convenient manner : if a noise is as loud (under certain conditions) as a 1000 cycles pure tone of intensity *n* decibels above an agreed zero near the threshold of audibility, then the noise has a loudness of *n* phons.*

* As in the case of illumination measurements (or even of temperature measurements), the figures used for expressing a loudness on the phon scale do not necessarily bear any direct relation to the sensations experienced. In other words, just as we do not expect an illumination of 60 foot-candles to be twice as bright as one of 30 foot-candles, we must not expect a noise having a loudness of 60 on the phon scale to be twice as

(*Footnote continued at foot of next column*)

TABLE I. A

SINGLE HOMOGENEOUS PARTITIONS

Partition number	Description of test partition: Construction	Weight (lbs./sq. ft.)	Thickness (inches)	Average sound reduction for frequencies (cycles per second): 200 and 300	500, 700, and 1000	1600 and 2000	200, 300, 500, 700, 1000, 1600, and 2000
				db.	db.	db.	db.
1	Essex board	0.61	$\frac{3}{16}$	14*	21†	29‡	—
2	Ankarboard insulating board	0.64	$\frac{1}{2}$	15 (14)	21 (21)	31 (31)	22 (22)
3	Treetex insulating board	0.69	$\frac{1}{2}$	15 (15)	23 (22)	31 (31)	23 (23)
4	Donnacona insulating board	0.70	$\frac{1}{2}$	11*	22†	34‡	—
5	Insulwood panel	0.75	$\frac{1}{2}$	16*	21†	32§	—
6	Lloyd wall board	0.77	$\frac{1}{2}$	20 (16)	25 (22)	32 (32)	26 (23)
7	Plywood	1.0	$\frac{3}{8}$	18 (18)	24 (24)	35 (34)	26 (25)
8	21-oz. window glass	1.3	$\frac{3}{32}$	20 (19)	27 (25)	37 (35)	28 (26)
9	Balsa wood panel	1.9	$1\frac{7}{8}$	18 (22)	23 (27)	34 (36)	25 (28)
10	Gaboon-faced block board	2.7	1	26 (25)	27 (30)	38(38)	30 (31)
11	Plate glass	3.8	$\frac{1}{4}$	28 (28)	33 (32)	45 (40)	35 (32)
12	Mahogany	4.9	2	28 (30)	36 (34)	44 (42)	36 (34)
13	Wood-fibre slabs plastered on both faces	13.1	2	36 (37)	39 (41)	42 (48)	39 (41)
14	Cellular anhydrite blocks	14.3	3	39 (38)	42 (42)	52 (48)	44 (42)
15	Cellular anhydrite blocks plastered on both faces with Pioneer plaster	16.8	$3\frac{1}{4}$	40 (39)	48 (43)	50 (50)	46 (43)
16	5-inch Eonit blocks plastered on both faces	20.4	$3\frac{7}{8}$	40 (40)	47 (45)	50 (51)	46 (45)
17	$2\frac{1}{2}$-inch clinker concrete plastered on both faces	20.7	$3\frac{1}{2}$	40 (40)	47 (45)	52 (51)	44 (45)
18	Lignocrete composition bricks, lime plastered on both faces	34.0	$5\frac{3}{8}$	48 (44)	53 (49)	56 (54)	52 (50)
19	$4\frac{1}{2}$-inch Fletton bricks, lime mortar	41.0	$4\frac{1}{2}$	38*	51 (49)	53‡	—
20	$4\frac{1}{2}$-inch Fletton brick plastered on both faces (lime mortar, lime and sand plaster)	44.0	$5\frac{1}{2}$	46 (47)	50 (51)	58 (56)	51 (52)
21	$4\frac{1}{2}$-inch Fletton brick plastered on both faces (cement mortar, hard plaster)	46.0	$5\frac{1}{4}$	45 (47)	51 (51)	59 (57)	52 (52)
22	Reinforced concrete	50.8	4	45*	50†	58§	—
23	8-inch panel of Portland cement and "foamed" slag, rendered on one face with cement and sand and plastered on the other with Sirapite	56.8	$9\frac{3}{8}$	44 (49)	48 (54)	60 (58)	51 (54)

* For 300 cycles per second only.
† Mean for 500 and 1000 cycles per second.
‡ For 1600 cycles per second only.
§ For 2000 cycles per second only.

The architect's problem would be simplified if it were practicable to measure the sound-insulation afforded by partitions directly in loudness units (phons), but unfortunately the only satisfactory method is to measure the extent (in db.) to which the wall reduces the intensity of sounds of various frequencies.

The problem presented to the architect is thus not an easy one, for he requires to select a partition, the insulation of which can only be expressed by a series of figures (one for each frequency), these figures being in db., to suit a noise of which all that is likely to be known is the loudness, expressed as a single figure in phons. The vagaries of the ear which are to a large extent responsible for this situation do, at the same time, provide a simplification.

loud as one with a loudness of 30. Actually a phon near the top of the scale represents a much bigger loudness step than it does near the bottom.

If it is desired to assess the relative loudnesses of two noises in terms of the sensation experienced, recourse may be had to measurements such as those of Churcher, King and Davies.[1] who have proposed a different scale of loudness units which would more nearly express the sensation. Broadly speaking, their results show that for sounds of medium loudness, an increase of 10 phons approximately doubles the subjectively assessed loudness.

[1] B. Churcher, A. J. King and H. Davies, *J.Inst.Elec.Eng.* 75, p. 401, 1934.

TABLE I. B
SINGLE INHOMOGENEOUS PARTITIONS

Partition number	Description of test partition: Construction	Weight (lbs./sq. ft.)	Thickness (inches)	Average sound reduction for frequencies (cycles per second): 200 and 300	500, 700, and 1000	1600 and 2000	200, 300, 500, 700, 1000, 1600, and 2000
				db.	db.	db.	db.
24	Thatchboard plastered on both faces	12.4	—	29*	35†	49§	—
25	Plycrete partition blocks plastered on both faces	16.4	3½	38 (39)	45 (43)	48 (50)	43 (43)
26	Hollow tiles, lime plaster on both faces	21.0	4¼	42 (41)	42 (45)	48 (51)	44 (45)
27	3-inch hollow clay blocks, glazed on one face and plastered on the other	22.4	3⅜	42 (41)	48 (45)	48 (51)	46 (45)
28	Fosalsil blocks	22.5	—	37*	46†	54§	—
29	3-inch hollow clay blocks plastered on both faces	23.2	3⅝	40 (42)	46 (46)	48 (52)	45 (46)
30	4-inch hollow clay blocks plastered on both faces	26.5	4¾	41 (42)	46 (46)	48 (52)	45 (47)
31	Terra-cotta partition blocks	27.6	—	39*	46†	58§	—
32	Hollow tiles, lime plaster on both faces	27.7	4¼	44 (43)	50 (47)	47 (53)	47 (48)
33	Bimol hollow blocks plastered on both faces	31.8	—	45*	49†	54‡	—
34	Fletton cellular bricks	31.8	—	40*	48†	56§	—
35	4-inch Cranham blocks plastered on both faces	37.0	6¼	44 (46)	52 (48)	56 (54)	51 (49)

* For 300 cycles per second only.
† Mean for 500 and 1000 cycles per second.
‡ For 1600 cycles per second only.
§ For 2000 cycles per second only.

A USEFUL RULE

As can be seen by reference to Tables 1 and 2, the sound-insulation of a partition normally increases as the frequency rises. In fact, for an average single partition the insulation increases by about 5 db. per octave. The variation is greater in the case of a complex partition. Now it happens that the ear is more sensitive to changes in the intensity of a low frequency sound than to changes in a medium frequency sound. That is to say that, whereas for frequencies in the neighbourhood of 1000 cycles per second a 1 decibel change of intensity is appreciated as a 1 phon change of loudness, in the neighbourhood of 100 cycles per second a 1 decibel change of intensity is appreciated as about 1½ phons change in loudness. This compensates to some extent for the decreased insulation of partitions at low frequencies and it so happens that this compensation is almost complete for single partitions having an insulation between 35 and 55 db. at 1000 cycles. As the insulation of most partitions used in practice lies within this range, and the insulation at 1000 cycles is usually about the same as the insulation averaged for all frequencies (last column, Table 1), it follows that we can make the general rule that for most solid building partitions the average sound-reduction factor in decibels is numerically approximately equal to the reduction in loudness, expressed in phons, which is produced in the frequency range 100-1000 cycles per second. For sounds of higher frequency the reduction in loudness will be greater than the average sound-reduction factor.

The above-mentioned relation, while it is useful, should be used cautiously since it has not been tested experimentally and also since the arguments hold strictly only for pure notes and not for the complex mixtures of frequencies which are commonly met in practice. In any case, it holds, of course, only for single partitions, since complex partitions commonly transmit low frequencies more readily than a single partition having the same average insulation.

To sum up, an approximate rule for specifying a partition which is to deal with definite noise conditions is to choose a single partition having an average sound-reduction factor expressed in decibels at least numerically equal to the difference between the loudness (in phons) of the noise which is to be screened and the loudness which would be considered acceptable on the quiet side of the partition. If a complex partition is required then it should be chosen so that its insulation at low frequencies is about the same as that of the single partition chosen as described above.

The alternative, simpler and in some ways more reliable method is to select a partition by comparison with some other partition whose performance is familiar to the designer. For instance, many people have a fairly clear idea of the performance to be expected from a 4½-in. brick wall the sound-reduction factors of which are given in Table 1. A partition whose measured sound-reduction factors at all frequencies exceed those of the 4½-in. wall will evidently be superior.

TABLE II

Complex Partitions

Partition number	Description of test partition: Construction	Weight (lbs./sq. ft.)	Thickness (inches)	Average sound reduction for frequencies (cycles per second): 200 and 300	500, 700, and 1000	1600 and 2000	200, 300, 500, 700, 1000, 1600, and 2000
				db.	db.	db.	db.
36	Two sheets of ½-inch fibre board separated by 2-foot air-space	1.5	25	33 (20)	46 (26)	65 (35)	48 (27)
37	Two sheets of aluminium separated by air-space of about 2 inches	1.6	2	10 (21)	26 (26)	52 (36)	29 (27)
38	Idem ; interspace filled with cork feathers	1.7	2	10 (22)	26 (26)	47 (36)	27 (28)
39	Idem ; interspace filled with Kapok	1.8	2	10 (22)	30 (27)	50 (36)	30 (28)
40	Idem ; interspace filled with Kapok blanket	1.8	2	10 (22)	29 (27)	52 (36)	30 (28)
41	Idem ; interspace filled with eelgrass	1.8	2	13 (22)	27 (27)	48 (36)	29 (28)
42	A layer of ½-inch fibre board on each side of a frame of 2-inch wood. 1-inch air-space between layers	1.9	2	17 (22)	35 (27)	56 (36)	36 (28)
43	6 layers of Alfol special foil (0.007 mm. gauge) attached to wood frame in space between ¼-inch 3-ply wood and ⅛-inch compressed wood board	2.1	2	21*	28†	52§	—
44	Thermolux 3-ply glass	2.2	5/16	22 (24)	28 (28)	40 (37)	30 (29)
45-55	Double window of 21-oz. glass at following spacings :—						
	8 inches	2.6	8 3/16	40 (24)	52 (29)	66 (38)	53 (30)
	7 ,,	—	7 3/16	36	47	62	48
	6 ,,	—	6 3/16	36	50	67	51
	5 ,,	—	5 3/16	35	49	64	49
	3 ,,	—	3 3/16	28	52	64	49
	2 ,,	—	2 3/16	23	49	64	46
	1 ,,	—	1 3/16	20	42	65	42
	¾ ,,	—	12/16	18	41	64	41
	½ ,,	—	11/16	22	36	56	38
	¼ ,,	—	7/16	23	32	52	35
	⅛ ,,	—	5/16	24	27	50	33
56	A layer of ½-inch fibre board on each side of a frame of 2-inch wood. 3-inch air-space between layers	2.6	4	23 (24)	43 (29)	62 (38)	42 (30)
57	Two sheets of aluminium with interspace filled with Zonolite	3.2	2	22 (26)	30 (30)	46 (39)	32 (32)
58	A layer of ½-inch Insulwood on one side of 4-inch by 2-inch studding at about 14-inch centres	3.5	4½	16 (27)	25 (31)	35 (40)	25 (32)
59	A layer of ¾-inch Insulwood on one side of 4-inch by 2-inch studding at about 14-inch centres	3.9	4¾	14 (28)	26 (32)	36 (40)	25 (32)
60	A layer of 7/16-inch B.P. insulating board on each side of 4-inch by 2-inch staggered studding with layer of ½-inch Balsam wool between the studs	4.2	6	26 (28)	51 (32)	75 (41)	51 (33)
61	A layer of ½-inch Insulwood on each side of 4-inch by 2-inch studding at about 14-inch centres	4.3	5	27 (28)	40 (32)	58 (41)	41 (33)
62	A layer of ½-inch fibre board on each side of 4-inch by 2-inch studding at 12-inch centres	4.5	5	24 (29)	42 (33)	56 (41)	41 (34)
63	A layer of ½-inch L.W. brand fibre board on each side of 4-inch by 2-inch studding at 14-inch centres	4.7	5	31 (29)	46 (34)	59 (42)	46 (34)

* For 300 cycles per second only.
† Mean for 500 and 1000 cycles per second.
‡ For 1600 cycles per second only.
§ For 2000 cycles per second only.

(*Continued on next page*)

TABLE II (*continued*)

Partition number	Description of test partition			Average sound reduction for frequencies (cycles per second)			
	Construction	Weight (lbs./sq. ft.)	Thickness (inches)	200 and 300	500, 700, and 1000	1600 and 2000	200, 300, 500, 700, 1000, 1600, and 2000
				db.	db.	db.	db.
64	A layer of ½-inch fibre board on each side of 4-inch by 2-inch studding at 15-inch centres	4.9	5	36 (30)	48 (34)	56 (42)	47 (34)
65	A layer of ¾-inch Insulwood on each side of 4-inch by 2-inch studding at about 14-inch centres	5.2	5½	30 (30)	37 (34)	50 (42)	39 (35)
66	Two layers of ½-inch Insulwood on one side and one layer of ½-inch Insulwood on the other side of 4-inch by 2-inch studding at about 14-inch centres	5.2	5½	30 (30)	42 (34)	62 (42)	44 (35)
67	1-inch matchboarding on 4-inch by 2-inch studding at 12-inch centres	5.4	5	28 (30)	24 (34)	31 (42)	27 (35)
68	A layer of ½-inch L.W. brand fibre board on each side of 4-inch by 2-inch staggered studding, each set of studs at 14-inch centres	5.5	6	27 (30)	42 (34)	61 (43)	43 (35)
69	Two layers of ¾-inch Insulwood on one side and one layer of ¾-inch Insulwood on the other side of 4-inch by 2-inch studding at about 14-inch centres	6.2	6¼	26 (31)	45 (35)	61 (44)	44 (36)
70	Staggered 4-inch by 2-inch studding having a single layer of ½-inch Insulwood on one side and on the other two layers of ½-inch Insulwood separated by 2-inch by ¾-inch fillets. Each set of studs on 14-inch centres	7.3	7	38 (33)	47 (36)	68 (44)	50 (37)
71	Two sheets of ¼-inch plate glass separated by a 5¾-inch air-space	7.5	6¼	44*	57†	73§	—
72	Staggered 4-inch by 2-inch studding having a single layer of ¾-inch Insulwood on one side and on the other two layers of ¾-inch Insulwood separated by 2-inch by ¾-inch fillets. Each set of studs on 14-inch centres	8.4	7¾	36 (33)	49 (38)	78 (45)	54 (37)
73	Eldorado slab cork with concrete-like surface on both sides	9.2	—	35*	34†	61‡	—
74	A layer of ½-inch L.W. brand fibre board on each side of 4-inch by 2-inch studding at 14-inch centres. Each face plastered to a thickness of ½ inch	11.3	6	50 (36)	51 (40)	68 (46)	56 (40)
75	A layer of ½-inch Insulwood on each side of 4-inch by 2-inch studding at about 14-inch centres. One face plastered to a thickness of ¾ inch	11.6	5¾	36 (36)	46 (40)	60 (46)	47 (40)
76	A layer of ¾-inch Insulwood on each side of 4-inch by 2-inch studding at about 14-inch centres. One face plastered to a thickness of ¾ inch	12.2	6¼	36 (36)	46 (40)	66 (47)	49 (40)
77	Staggered 4-inch by 2-inch studding having a layer of ½-inch L.W. brand fibre board on each side. Each set of studs on 14-inch centres and each face plastered to a thickness of ½ inch	12.2	7½	53 (36)	50 (40)	66 (47)	56 (40)
78	Two sheets of plywood with the interspace filled with aluminium filings	14.0	3½	39*	28†	33§	—
79	Lath and 3-coat lime plaster on each side of 4-inch by 2-inch studding on 12-inch centres	16.4	6	38 (39)	45 (43)	63 (50)	48 (43)

* For 300 cycles per second only.
† Mean for 500 and 1000 cycles per second.
‡ For 1600 cycles per second only.
§ For 2000 cycles per second only.

(*Continued on next page*)

TABLE II (*continued*)

Partition number	Description of test partition			Average sound reduction for frequencies (cycles per second)			
	Construction	Weight (lbs./sq. ft.)	Thickness (inches)	200 and 300	500, 700, and 1000	1600 and 2000	200, 300, 500, 700, 1000, 1600, and 2000
				db.	db.	db.	db.
80	Two layers of Thatchboard, each 3 inches thick including facing of plaster on one side, insulated from one another. Plastered faces outward and a layer of Temperac quilt in the interspace ..	16.6	—	40*	58†	75§	—
81	Lath and 3-coat hard plaster on each side of 4-inch by 2-inch studding on 12-inch centres ..	17.0	5½	43 (39)	54 (43)	63 (50)	53 (43)
82	Two leaves of Fosalsil blocks separated by ½-inch air-space. (Faces unplastered.)	18.3	4½	48*	45†	62§	—
83	A layer of ½-inch Insulwood on each side of 4-inch by 2-inch studding at about 14-inch centres. Each face plastered to a thickness of ¾ inch ..	18.8	6½	42 (40)	51 (44)	62 (50)	52 (44)
84	Two leaves of Eonit 2-inch blocks separated by 1½-inch air-space, plastered on outer faces	18.9	6	47 (40)	45 (44)	58 (50)	49 (44)
85	A layer of ¾-inch Insulwood on each side of 4-inch by 2-inch studding at about 14-inch centres. Each face plastered to a thickness of ¾ inch ..	19.3	7	44 (40)	52 (44)	67 (50)	54 (44)
86	A layer of 1-inch Thermacoust wood fibre slabs on each side of 3-inch by 2-inch staggered studding at 16-inch centres. Each leaf and its studding insulated by ½-inch felt. Outer faces plastered to a thickness of ½ inch ..	21.9	9	52 (41)	54 (45)	66 (51)	57 (45)
87	B.P. Bitumen laminated board 7/16 inch thick, nailed to 1½-inch by 1-inch battens on one side of 2-inch concrete. Board plastered on outer face to a thickness of ⅜ inch	24.1	—	40*	44†	62‡	—
88	Donnacona board on battens on one side of 2-inch concrete. Outer face of board plastered ..	25.5	4	45*	48†	57‡	—
89	A layer of Celotex on battens on one side of 2-inch concrete. Outer face of Celotex plastered	26.7	—	46*	44†	54‡	—
90	Two courses of Fosalsil blocks separated by ½-inch air-space, outer surfaces plastered	27.4	5¾	48*	52†	64§	—
91	3-inch clinker slabs with fibre board stuck on each face ; plastered on outer faces	27.4	5	38 (43)	34 (47)	67 (53)	45 (48)
92	2 inches of concrete on one side of a panel of Thatchboard 2 inches thick, plaster on the other side	28.1	—	45*	46†	59‡	—
93	3-inch reinforced concrete with fibre board stuck on each face ; outer faces plastered	45.0	5	46 (47)	36 (51)	73 (56)	50 (52)
94	4½-inch brick with fibre board stuck on each face ; outer faces plastered	46.8	6¼	44 (47)	46 (51)	73 (57)	53 (52)

* For 300 cycles per second only.
† Mean for 500 and 1000 cycles per second.
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§ For 2000 cycles per second only.

H.R.H. The Duke of Gloucester [*Hon. F.*] *visits the Exhibition*

THE HEALTH, SPORT AND FITNESS EXHIBITION

By JOHN SUMMERSON [*A.*]

Writing about the exhibition in any journal but this, I should state with particular emphasis and a limpid conscience that it was in every respect admirable—a lucid and fascinating exposition of what architects are contributing to the great problems of national health. But writing, as it were, in the family circle, a mere demonstration of good will and admiration is inadequate, and I find myself undertaking the delicate and, as it happens, exceedingly exacting task of picking holes. The R.I.B.A.'s Exhibition policy is young, perhaps even embryonic. It has already been very successful. It is susceptible of development along all sorts of different lines. Therefore, rigorous criticism is worth while.

In an architectural exhibition, it seems to me, the first and greatest problem is to get photography under control. Photographs can so easily become a bore. They are substitutes for the real thing and easy substitutes at that. Everybody takes photographs ; they are cheap to buy ; they rarely possess any great intrinsic virtue as exhibitable objects. Although, in mass, they can be so arranged as to become eloquent and even impressive, they never quite escape that uncomfortable taint of *ordinariness*. It is a relief, in the present exhibition, to come across a map or a diagram—something to stimulate that part of one's attention which photographs put to sleep. Let me say at once that the maps and plans in the exhibition seem to me excellent in their smart get-up and dramatic use of colour. But I wish there were more of them. I wish they were more pretentious, and I wish they could have been directly related to big groups of photographs. I have an idea, for instance, that in an exhibition of this sort it might be worth taking a single building—say, in this case, a swimming pool—making a huge coloured isometric diagram and surrounding it with photos of various details, each with a tape indicator stretching to the relevant view-point. It would, I suppose, be expensive and it would break through the limitations of the standard exhibition screens. But it suggests a way of organising a bunch of photographs and giving them some particular point—getting them *under control*.

Several things about the exhibition made me suspect that its organisers were acutely conscious of the dangers of ordinariness which I have been trying to indicate. The frequent incidence of "lovelies"—swimming, skiing, skating, sun-bathing—was, I take it, an attempt to humanise the atmosphere of the Henry Florence Hall ; and the attempt succeeded, if rather dimly. Similarly, the Lillywhite-Selfridge cartouche brought colour into the place and covered up the wood-carvings with something (to me) slightly less depressing, though I must say I think shop windows and Government Pavilions are the proper places for that sort of thing. And although I should like to enter a plea for more showmanship, more variety, in the R.I.B.A. Exhibitions, the showmanship must all be part of the exhibition and not just colourful tit-bits pinned on afterwards.

So much for considerations of technique. I hope, by the way, that you do not think I should like every Institute exhibition to be a figurative display in the manner of the MARS Group's recent effort. That is not at all what I mean. But there ought to be a way of using the Institute's photographic resources in a rather more pungent and convincing way.

Looking at the "Health, Sport and Fitness" exhi-

bition in detail, it is certainly difficult to find anything to criticise in its admirably balanced selection and uniformly excellent level of photographic performance. I may as well confess that the title worried me a little. There is a trace of ambiguity in it—as there is, indeed, in the range of the exhibition. "Health *plus* Sport *plus* Fitness." "Health" alone lets you in for a lot, especially where its preventive aspects are concerned—which reminds me that there are no bomb-and-gas-proof devices among the photographs. Health, mental and physical, represents the architect's whole job and his only justification for being about the place at all is that he is supposed to be interpreting the principles of wholesome living in terms of building. Well, then, if health means all that, the addition of sport and fitness is anti-climatic. For my own part, I wish the exhibition had just been about architecture and sport, and limited in extent only to the Henry Florence Hall. After all, the public do not have to pay to come in so there is no question of providing a "good money's worth"; and it is always satisfactory to come away from an exhibition with the feeling that you have a firm grasp of *all* it had to tell you and still some energy left over. But there I am very likely wrong. The opinion of a journalist who has to go and look at too many exhibitions anyway is probably biased.

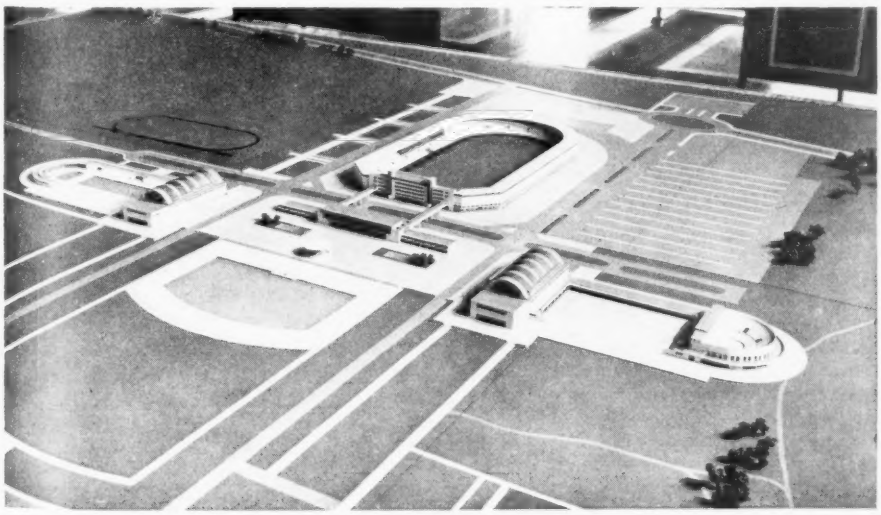
Finally, there is the *story* if the exhibition to be considered. It is easy to follow but would have been still easier had the headings in the Catalogue been identical with those on the walls. The remorseless continuity round walls and screens, regardless of the natural points of emphasis provided by the surrounding architecture might possibly be criticised. It slightly depressed me, for instance, to find Open Spaces in the darkest corner of all.

Only those who have had a hand in exhibition-making know what a job it is to get the right pictures every time and not to dull the point of your story by resorting to second-bests. The Everyday Health Section is, in this, a triumph of selection. It gives a lively picture of everyday English life, its sunny, smoky, gay and grimy aspects. The Sanitation and Anti-noise diagrams suggest to me the sort of thing which would have a great appeal if done bigger and better and given axial emphasis in the layout; the Sanitation picture, in particular, backed by subsidiary diagrams and a battery of photographs, could be made an enthralling exhibit (though such an expansion would have been out of scale, I admit, in the present context).

Open Spaces is a delightful section. Aerial photographs are invariably seductive (we are never too grown-up to envy Gulliver) and Turgot's Paris, coloured to show the distribution of the Royal—now public—parks, is a good feature. So is the well-designed diagram of London's Green Belt. Open Spaces carry us into the Henry Florence Hall, reaching, via Country Towns, Villages, Roads and Seaside places, the main section of the exhibition. This is called Buildings for Sport and Recreation and contains what is, so far as I can judge, a fully representative survey of the important swimming baths, stadia sports centres, sports parks and so on, constructed in recent times. One has to admit that the foreign examples come out rather better than our own, but some of the latest English contributions are so good that we need not worry about what is, after all, merely a fortuitous time-lag.

The large and beautiful model of a Sports Centre and recreation ground for a town of 250,000 inhabitants forms a fitting climax to the whole exhibition. I cannot persuade myself that sport can ever be delightful when it is collectively monumentalised in a vast centre like this. But if people want that sort of thing, why of course they must have it and the model proves how grand it can all look when an architect has planned it.

There remain two sections, namely, Escape from the Town, with an enticing selection of week-end cottages, and Healthy Childhood, which makes an appropriate tailpiece and brings us back to the staircase. One word more. The Catalogue is excellent.



The Central Model

THE OBJECT OF THE EXHIBITION

A Public Lecture by John Gloag [*Hon. A.*]

Given on the Opening Day of the Exhibition

We have heard, and we are likely to hear, a good deal about official Government-sponsored schemes for making the people of this country, if not the physical aristocracy of the earth, then at least healthy and fit. This exhibition shows, with startling and almost brutal clarity, the chief task to which any Government concerned with the health of its citizens' bodies should address its attention.

It is a habit of the British nation to produce great ideas, to think little of them, and to allow those great ideas to be bedded out, as it were, in some foreign country. They are then re-introduced, after a time-lag of twenty or more years, hailed as new ideas, and given an alien significance which does not make them readily acceptable to the English.

We are inclined to attach too much importance to exercises as opposed to exercise. I contend that the man who can walk ten miles without effort and enjoy it is in a better state of physical fitness and is inclined, on the whole, to be a better proposition as a human being and a social asset than the man who, with set teeth and grim determination, does exercises before breakfast (and, worse, talks about them). No form of dieting, no form of exercises, can be regarded as remedies for bad conditions of living.

Thousands of people suffer from ill-adjusted or insufficient nourishment. Thousands of people are denied opportunities of appreciating simple, natural things, and cannot cultivate and become enriched by that love of the open air which is a national characteristic. Without such physical and spiritual nourishment there can be no national understanding nor enjoyment of fitness.

Now, just over thirty years ago one of the greatest men this country has produced started what is, without exception, the finest fitness movement the world has ever seen. It affected, in time, every country in Western Europe; it affected the United States and even reached the East. It appealed to men and presently it appealed to women, and it caught people young and taught them some invaluable things about the art of living. This great movement, which appears to have passed unrecognised during the recent official preoccupation with national fitness, with all its wonderful potentialities and with the training it gives, not only in bodily health but in observation and in the appreciation of natural things, was the creation of a man of indisputable genius, Lord Baden-Powell. When he founded the Boy Scout movement, and when the first trial camp for Scout training for boys was held at Brownsea Island, in 1907, he made possible everything that you see in this exhibition to-day in the way of open-air recreation, because that movement inculcated and developed a widespread love of outdoor

Diagram of a yacht, by A. G. Goodair [*A.*]

recreation that transcended enthusiasm for playing and watching organised games, and which produced a generation that sought, in open-air life, a new fitness. Before the Boy Scout movement there were games and sports; but I do suggest that this great movement, which was presently supplemented by the Girl Guide movement, co-ordinated national ideas of fitness in a subtle and far-reaching manner. It constituted the most remarkable propaganda for training children to do sensible things. Its educational value was profound and it is to-day the finest plinth upon which could be erected all schemes of national fitness. Finally, it has the great merit of being a voluntary system, utterly unconnected with the military discipline which some nations use to force up the physical standards of their country.

Good citizenship does not depend and in this country of ours has never depended upon compulsory discipline of a military or even of a semi-military kind. The object of any campaign for fitness is surely the living of a full, healthy life. But preparations for fitness are sometimes regarded as ends in themselves, particularly by those people whose desire to organise the lives of their fellow-creatures is conditioned by what can only

be described as an amateur military outlook. Physical jerks and then more physical jerks, and then, after a breath of fresh air and the brisk encouragement of selected profanity by a physical instructor, back to living conditions that are often worse than the conditions of life on the Western Front during the Great War for civilisation.

The first job in a national fitness campaign is to clear away the rubbish that makes people unfit. Some of that rubbish is to be found in old-fashioned heads. Most of it is masquerading as accommodation fit for human habitation. Some of it is the by-product of that most disgusting of human vices—greed.

In this first task the collaboration of the architectural profession is essential; and how well that profession can provide the proper framework for national fitness is illustrated by this exhibition, and the deep interest of the profession in the campaign is demonstrated by the fact that such an exhibition is being held.

The second job in a national campaign to increase fitness is to give practical encouragement to every movement that takes people into the countryside for recreation. The Boy Scout and Girl Guide movement could be enormously enlarged to give more children, at an early age, the vast educational benefits it bestows. It will again give meaning, unrestricted meaning, to the claim that as a nation we love the open air: it will implant a love for Nature and a respect for the beauties of the countryside, and will give to new generations of town dwellers what they lack so conspicuously at the moment—good manners in the countryside. It will give more facilities for youth to enjoy their own country, provide national parks, extend encouragement for walking, for cycling, for seeing the different counties, endow youth hostels; and, most important of all, in our towns and cities, erase those blots on our civilisation—the slums.

When you see from this exhibition the civilisation that is waiting for us, just round the corner, it is difficult to believe that the re-moulding of our country can be delayed longer than it takes to get out the plans and to erect the structures that would drain from our national life the misery, the disease and the waste that in every big town or city are accepted, even by their victims, as part of the order of things. Just as we accept such services as electricity, gas and water do we accept slums, air-pollution, noise and ugliness.

To the lasting credit of our public men and our statesmen, let it be said that no British Government has ever neglected to do something to alleviate the appalling conditions under which far too many people live. The conception of a national fitness campaign is magnificent—it is a great creative idea, and it must not be allowed to peter out, nor must it become infected with the creeping paralysis that arises from a surfeit of official forms.

This exhibition, I am glad to say, will travel about this country. It will inevitably start trains of thought, and when trains of thought are fired in England they burn slowly but surely until, after the passage of years, a mild but unmistakable explosion blows some archaic habit or custom or piece of needless lumber sky high. The train of thought started by Lord Baden-Powell just over thirty years ago is now taking effect: we are concerned now, as he was concerned then and has been ever since, with national fitness. But the lords of propaganda on the troubled Continent have made such a song and dance about national fitness that, as usual, we attribute our interest in it to their example, whereas like most other sensible ideas it began here. At least we shall be able to show that a nation of individualists can do the job without the military high jinks that seem inseparable from any demonstration of fitness staged in the lands that have lost their liberty and laughter.

The exhibition shows how under every form of Government attempts are being made to reorganise life on a better, cleaner and safer basis. It proves, if proof is needed, that true health and fitness are as dependent upon decent environment as upon the paternal encouragement of our temporal masters.

In the surroundings the modern architect can give us we may freely develop such high standards of physical fitness that we shall, in the words of Dean Inge, no longer "tolerate shapes in human beings that would horrify us if we saw them in a horse."

Montage, 10 feet by 5 feet, on the main stair, designed and executed by N. C. Westwood [*A.*]

A general view of part of the scheme

THE ARCHITECT AND HOUSING BY THE SPECULATIVE BUILDER

ARTICLE IX

Steel Framed Houses

A Scheme by Denis Poulton, Dip.Arch.L'pool [*A.*]

This is an experiment in quantity house building that merits attention. The architect has aimed at producing for a firm of estate developers cheaper and more adaptable houses than result from the usual methods employing 11-inch cavity walls. The design is the result of considerable experiment on two estates.

The houses are built with light steel frames, employing units of small section capable of being moved and erected by hand labour. These take the loads of roof, floors and the upper internal partitions. The building procedure is as follows. Stanchion bases are fixed to the foundation concrete with rag bolts, templates being used. The members are connected by ordinary bolts, and the frame protected by a thick coat of tar after fixing. The party wall and flues, between the pairs of houses, follow ordinary practice and are built while the frame is being erected. Then the pitched wooden roof is framed, tiled, flashed and finished. The walls consist of a 4½ inch brick skin which is not carried by the frame, but abuts on it, the weight being borne on the foundations, and an inner skin of 2½-inch plaster blocks. The two skins are not connected by wall ties.

The total amount of steel is between 1 and 1½ tons per house. The frames for a pair of houses have been erected by two men and a boy in as little time as eight and a half hours.

Certain advantages will be obvious. After the finishing of the roof, practically all work proceeds under cover which not only reduces delays owing to rain, but keeps the floor joists and other structural timbers dry. In the earlier houses the partitions were formed of plaster blocks, but in the later ones, wooden studding faced with plaster board has been used. Thus the interior construction becomes almost wholly a dry process so that the houses are habitable almost as soon as they are finished.

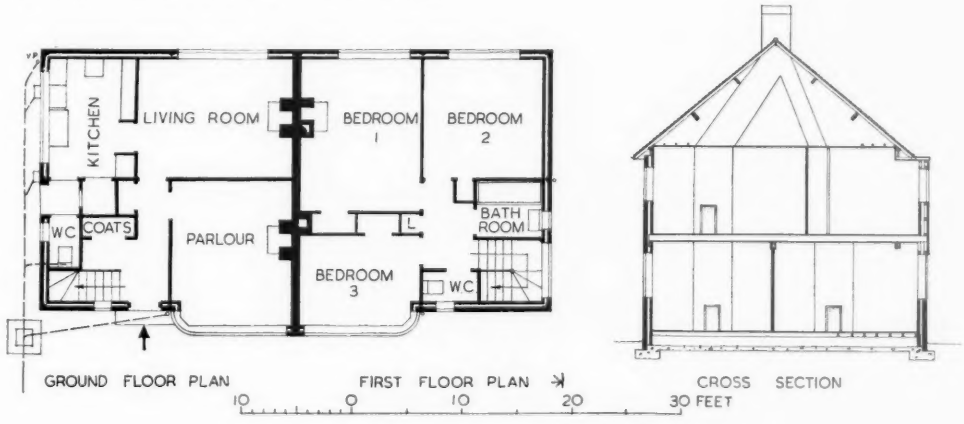
The frame saves time in building by giving levels and plumbing lines ; it allows the timbers to be exactly cut, if desired, away from the site. In the later houses it has

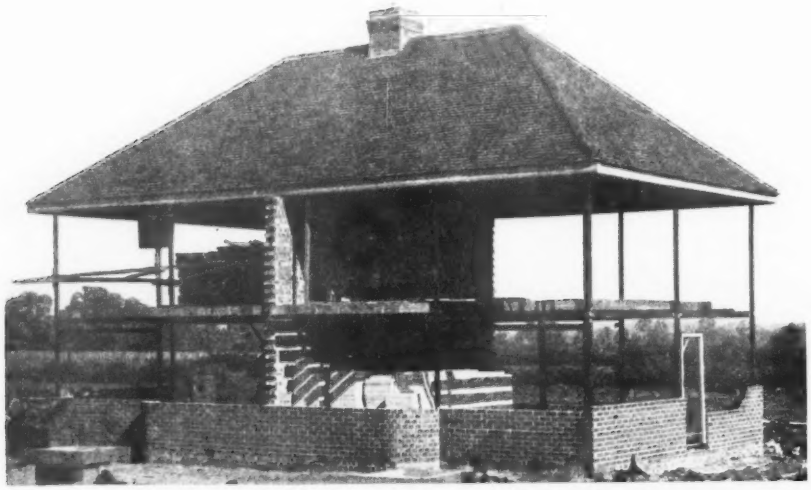
also acted as scaffolding for the outer brick skin, which is built overhand from light trestles. Another advantage of the construction is the fluidity of the plan on either floor. During building operations the internal partitions can, and in several cases have been, moved to give a different arrangement of rooms or cupboards.

The scheme from which these illustrations are taken is a speculative development of about 380 houses on a 60-acre site in North-East Buckinghamshire. The structural experiment proved entirely successful. The builder was satisfied that there was a considerable overall saving, in spite of the cost of the steel frames. The delay in getting steel units of small sections, plus the rise in steel prices, owing to the rearmament programme, has caused this method of construction to be temporarily abandoned. The important fact is that cheaper building was obtained ; the saving ought to be a material one, where there is careful organisation of the trades to take fullest advantage of working under cover. Large schemes are likely, however, to show greater proportionate cost reduction than small 'ones.

It remains to be considered whether the resulting structure is of equal value to one with ordinary hollow walls, or rather whether it is good enough for a reasonable life, say, forty years. The principal uncertainty is the life of the steel frame ; such evidence as is available (early American steel frame houses) goes to show that at least thirty years is a not unreasonable expectation. The second uncertainty is the continued stability of a 4½-inch external wall, in cement mortar, two floors high. It must be remembered, however, that the wall

Right : Site plan of the whole scheme. The layout provides for two permanent open spaces, one of 8½ acres and one of 6½ acres (at the foot of the plan). The through roads on the left side were required by the planning authority for a possible future extension. Below : Plans and section of Type No. 1, which has an internal ground floor area of 484 square feet and sells at £595

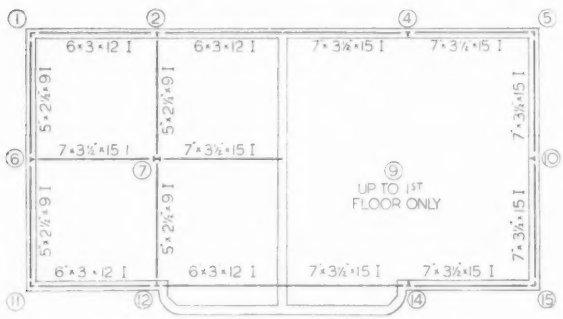




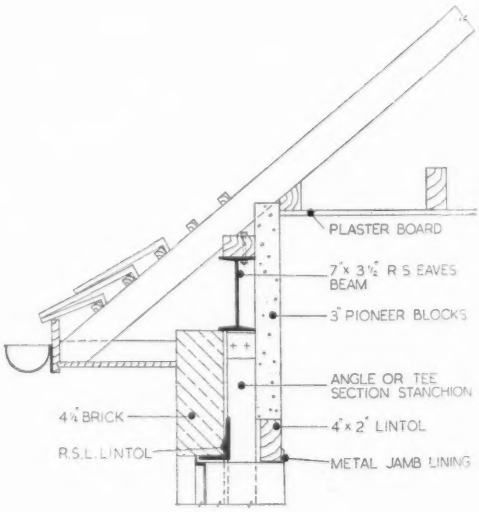
The roof and party wall completed and the outer brick skin under construction

carries no load but its own weight, and that wind pressure is to some extent borne by the frame.

The houses are well finished, and equipped more fully than is generally the case in speculative work. The house that is illustrated in detail sells at £595; other types at £495 and £525. Quite apart from this scheme or from speculative building in general, it can be considered as proved that steel framework will be in normal times a practicable proposition in small house-building.

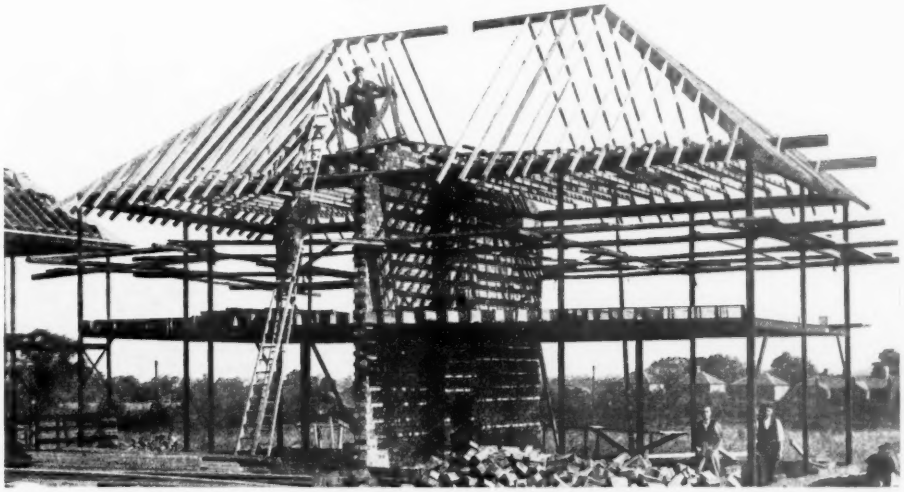


Above: Steelwork plan of a pair of houses. All sections are light enough to be lifted by hand labour, the total steelwork weight per house being between one and one and a half tons.
Right: A detail of construction at the eaves. The R.S.L. lintol is not connected to the frame



TYPICAL SECTION THROUGH EAVES

SCALE 1/16 FULL SIZE



The party wall built, the frame erected and the woodwork of floors and roof being fixed. The complete steel frame for a pair of houses has been erected in 8½ hours by two men and a boy. Scaffolding is not necessary

A completed pair of houses. The rendered bay windows are coloured and the houses grouped according to colour

THE R.I.B.A. AND ITS MEMBERS

In view of the correspondence which followed the President's inaugural address, the Council of the R.I.B.A. think it desirable to re-affirm the policy of the Institute in respect of the initiation and carrying-out of building schemes, with particular reference to the employment of architects by public and other bodies.

The professional practice of architecture has changed much in the present century in conformity with, and probably because of, the changes in our general social system, the control of which is outside the scope of the R.I.B.A. Government departments, county and borough councils, railway companies, great commercial combines such as banks and breweries, are setting up architectural departments of their own which are doing the work formerly carried out for the most part by the private practitioner.

This system is extending and is becoming, by reason of the opportunities it provides, an appropriate channel for the production of buildings of the highest quality.

It is therefore of the utmost importance that the professional training and qualification of the official architect should be of the highest standard; and it should here be stated that the R.I.B.A. recognise no difference between those members who occupy official positions and those who do not. Their status within the Institute is the same and no distinction whatever is made between private and official members. It is hoped that the recent establishment of an Official Architects' Committee will do much to further the interests of official members and induce them to take a greater share in the work of the Institute with a view to closer co-operation between all members.

It is in the public interest that an ever-increasing amount of the building work done in the country shall be designed by qualified architects, whether official or private. The statutory responsibilities of public bodies in connection with Town and Country Planning, Restriction of Ribbon Development and other Acts are now such that constant advice by qualified architects is essential in the interests of the community.

There is no desire on the part of the Institute to suggest any encroachment on the legitimate spheres of the engineer or surveyor, nor competition with them in what are obviously their appropriate duties; but it cannot be denied that in both private and official building work too many schemes are initiated and too many buildings are still undertaken by men untrained in the all-important matters of planning and architectural design.

By reason of their training architects are the professional men best qualified to act as co-ordinators, and are therefore the right persons to hold major responsibilities in schemes in which architectural considerations are of primary importance.

In cases where the principal officer responsible to an authority is an engineer or surveyor, acknowledgment of the actual designer of a building should be made. This practice is followed in many architectural departments where official architects of high standing are the responsible officers, but should be extended.

In the design of great national or civic buildings or where a building is to be a national heritage, the choice of the designer should be made from as wide a field as possible in order to secure the finest result. The Institute favour the principle of competitions which has produced many fine buildings in the past.

Much may be done to increase the public appreciation of architecture by closer co-operation between all architects in any district. Only a comparatively small percentage of building work is designed by architects, and there remains a large field still untouched. Official architects are able to influence public opinion through county and municipal authorities towards the desirability of buildings of all kinds being designed by men trained for that purpose; and the Council urge all official members and all private members to work together, when the occasion arises, for the betterment of building and the consequent public benefit.

APPOINTMENT VACANT

The High Commissioner for India announces a vacancy in the service of the Government of the Punjab for a Provincial Town Planner.

Application should be made to the High Commissioner, India House, Aldwych, W.C.2, not later than 26 March. Candidates must be British born, fully qualified architects, or members or associate members of the Institution of Civil Engineers, must be members or associate members, by examination, of the Town Planning Institute, and must possess a diploma in Town Planning from the University of London or the University of Liverpool, or an equivalent diploma. In addition they must have had at least five years' practical experience in the design and execution of town planning schemes, preferably in India.

Age should be between 30 and 40 years on 1 April 1938. The pay will be Rs.1,050 per month, rising by Rs.50 a month to Rs.1,250. The selected candidate, if of non-Asiatic domicile, will get overseas pay of £30 a month.

Book Reviews

FROM THE GROUND UP*

"In matters of taste and judgment the most common and the most fatal of sins is to profess opinions not because they are genuinely held but because they seem fashionable. Powys never tampered with his judgment in this way and his sensitive power of discrimination never lost its freshness. In expressing his opinions he mingled courage, sincere humility and a respect for the personality and convictions of others into a unity perfectly balanced and completely natural."

This assessment of A. R. Powys by Lord Ferrers expresses the feelings that all held who knew Powys and who had the benefit of the clarifying sincerity of his opinion in correspondence or conversation. It is an opinion which many more can now form with this admirable little collection of his writings to reveal in perspective the true nature and character of this remarkable man. Too many of his brother architects knew him only as the author of a constant stream of vigorous combative letters in the papers which were the battlegrounds of S.P.A.B. policy. Public wordy warfare can never give a balanced picture and, as a consequence, it was Powys the apparently arrogant fighter rather than the modest inheritor of the faith of Morris, Philip Webb and Lethaby that thus appeared.

This faith, at all events that facet of it which was most evident in A. R. Powys's works and writing, can be described as belief in normality. This appears again and again in these essays :—

> "It is seldom that the normal is sought with excited zeal, yet it is the normal that is good and it is the normal that, fortunately, can most easily be gained. And the normal is not the average, neither in art, in letters nor in commerce. . . . Wherever art shines through man's work, be it in the trim finish of a railway embankment, in the nice edging of a newly ploughed field, or in the complete expression of an idea in sculpture, it will be seen that the normal has been fully and naturally developed and that 'Theories of Art' have had little influence. . . . Modernity and newness are as inseparable from normality as are the ways of an animal in any chosen period of its . . . evolution. The normal is not static."

This belief in normality, as this quotation shows, is in no way opposed to the progress of normal modernity ; what it is opposed to, the whole time and in every way possible, is the dominance of theory : "The root of our failures rests with the theory mongers," he said in an essay on the origins of bad architecture, and : "theorising is no good" and "where tradition is a force it is an inevitable force and one that is weakened in proportion as it is theoretically considered."

This dislike of theorising sometimes took turns which may be surprising to the doctrinaire arts and crafts man whose insistent cry is for local materials. Of this, Powys said : "One theory among others that occupies now altogether too much space in the minds of one school of thought is *the theory* that good architecture depends on the use of *local materials*. In no age except our own has this theory been advanced." (His italics.) He goes on to show that "the choice of materials in notable and wholly admirable buildings has always been dependent on proportional economy and on function. In those times when local materials were so often and so successfully used, builders did not hesitate to bring laboriously from a distance materials which on occasion better served their purpose."

Belief in "normality" should be a serene, comfortable faith, but, as Powys found and as anyone can find who reacts sympathetically to the idea, normality is a tantalising will-o'-the-wisp. The normality of the almost present fades into the past and into the realms of "theory" and history just as we learn to recognise it and are persuaded to practise in that way. The normality of the actual present is as elusive as the normality of the future is unforseeable. In fact, the only normality that can be caught, measured, analysed and talked about is the normality of the past ; even the most resolute anti-theorist has to defend himself by more than good will against the dangers of assuming that even the lessons of the past apply to-day.

The "normalist," if we may call him so, may seem to have fled nervously from more strenuous loyalties based on theories, but in fact the faith or calm dependence on normality is a no less difficult bed to lie at ease on than that of positive theories. Underlying Powys's faith as evident in these essays was what his brother, J. C. Powys, calls an "interior humility that was at once disarming and disconcerting . . . a concealed self-depreciation" which, he suggests, was as much an integral part of his nature as his emphatic positivity. Is it possible that this disconcerting self-depreciation was a symptom of the quite natural undercurrent of scepticism that may disturb one who so strenuously defends a wraith which neither he who defends it nor the legion of attackers can see. To defend normality is rather like defence of goodness or truth or air or water. The very fact of defence introduces an element of artificiality into the idea of normality that spoils its essential quality.

The essays are on many different subjects. All have been published previously, many as magazine articles. The omission of dates is unfortunate. Presumably the editors considered the opinions timeless to such an

* *From the Ground Up :* Collected papers of A. R. Powys 1882-1936, with an introduction by J. C. Powys. 8vo. xx+180 pp. + 2 photos. London : Dent. 1938. 6s.

extent that the dates of their publication would be irrelevant, but this is by no means so; even the theoretical essays such as that which we have quoted on the origins of bad architecture are full of contemporary reference and opinion that is of good effect because it represents the normality of its time and not ten years before or after—(Powys's ideas did not stand still).

Some of the papers are biographical, there is an excellent assessment of Bentley, many are topical—as, for instance, those on Waterloo Bridge and housing. All of them are hundred per cent. Powys, full of the fruits of his acute powers of observation and sensibility for the essentials of *building*. His statements are always direct, argumentative, even aggressive, but never intolerant, despite what J. C. Powys calls his "formidable dogmatism."

His manner of writing is simple and effective. He gets his meaning across with economy of words and without any ideological wrapping. It is a good book, much more than a memorial of Powys, which it is, by the way. It is a book for every architect to read who seeks in any way contact with one of the most glowing faiths and one of the most notable disciples of that faith in the history of English architecture. What Powys and those in his line before him taught has much of it, perhaps all, been absorbed into the most sincere creeds of modernism and is part of the common inheritance of our good architecture always.

VICTORIA COUNTY HISTORIES

THE VICTORIA HISTORY OF THE COUNTIES OF ENGLAND: *Northamptonshire, Vol. IV, and Sussex, Vol. IX.*

The Victoria County History, having achieved the publication of its hundredth volume, is still far from its ultimate goal. Many things have conspired to delay it; much of the laboriously collected material which has waited so long to see the light has had to be brought up to date, and much to be written anew, but the high standard which was set up at its Victorian inception remains, and with every year the value of the long series is enhanced.

Its two latest volumes, *Northamptonshire IV* and *Sussex IX*, are both topographical, and as such too full of detail to be criticised at length. Since the *History* was started another comprehensive survey has come into existence, in the *Reports of the Royal Commissions on Historic Monuments*. The two series of volumes, in dealing with the same areas, are, nevertheless, complementary rather than repetitive—the official report is a census whose merit lies in its completeness, leaving nothing unmentioned which is older than a fixed date. The *History* cannot go into such minutiæ, but while treating the outstanding monuments with even fuller detail than the *Reports* is concerned with the human side of things, which the official record ignores. Between the two the nation is well served; and while the *History* cannot compete with the wealth of illustration which adds so much to the value of the *Reports*, it may claim to cater for a wider circle and to have something for everybody.

The *Northamptonshire* volume is fortunate in its material. The churches of Brixworth, Earl's Barton and Raunds are in the front rank of national monuments, but in this county of fine stone the standard of architectural merit is so high that there is hardly a parish which has not some notable ecclesiastical or secular building to show. And valuable as are the older County Histories, there can be no doubt that the greater attention paid in our days to the history of our native architecture makes the descriptions in these volumes a record of the greatest importance, such as never before has been compiled for the use of future generations. The mass of material makes conciseness necessary, for a history on this scale is in the first place a work of reference, but it is pleasant to turn aside for a moment to consider the misdeeds of the rabbits of Boughton, who so dug up the churchyard there that the inhabitants were afraid to go to mass for fear of breaking their necks, and the place was in such a state that it would "abhorre any Crystiane manys harte in the world to see it." And we cannot but be glad to read that Joseph Bentham, rector of Broughton, wrote in 1657: "Two Briefe but Usefull Treatises, the one touching the office and quality of the Ministry of the Gospel: the other of the Nature and Accidents of Mixt Dancing."

The *Sussex* volume is concerned with the Rape of Hastings—small in area but full of history and historic monuments, such as Hastings, Winchelsea, Rye, Battle Abbey, Hurstmonceaux Castle, Bodiam Castle and Etchingham Church, not to mention the wealth of mediæval houses of which a survey like this reveals so much. A welcome feature, which follows the practice of the Royal Commission's volumes, is a town plan like that of Rye, showing the proportion of old buildings which survive along the street frontages; the sort of record which should make even the most enthusiastic town planner hesitate to drive a wide straight road through so much history.

CHARLES PEERS [*F.*]

THE COTSWOLDS

COTSWOLD COUNTRY. *By H. J. Massingham. 8vo. 120 pp. + 133 plates. London: Batsford. 1937. 7s. 6d. net.*

This recent book by Mr. Massingham is really a study in regionalism conditioned by one material—limestone—for it covers an area much larger than that popularly thought of as Cotswold country; an area that stretches from Market Deeping, Rutland, in the north-east, to Cricket St. Thomas, beyond Yeovil, in the south-west; from Glastonbury to Fenny Stratford in Buckinghamshire. It is a large area, but Mr. Massingham has found space to give some idea of the infinite variety of scene and building in its length and breadth—the dour, grey stretches between Stow and Burford; the softness of the Evesham Vale; the richness of Montacute; the incomparable craftsmanship of Sherborne Abbey or Stanway; and the simplicity of the cottage building; the changing colour of the stone, from warm red in the north through yellow-grey to the glorious, glowing Ham Hill stone of the south. It is a country mercifully almost unspotted by poor building development and only latterly by war-conditioned aerodromes.

The photographs, it need hardly be said, are excellent. Only one criticism: the maps at the beginning and end of the book are clear and useful up to a point. But so much depends in Cotswold country on the lie of the land that the addition of contours would have added immeasurably to them.

Review of Periodicals

Attempt is made in this review to refer to the more important articles in all the journals received by the Library. None of the journals mentioned are in the Loan Library, but the Librarian will be pleased to give information about price and where each journal can be obtained. Members can have photostat copies of particular articles made at their own cost on application to the Librarian.

Reprints of these reviews, printed on slips suitable for cutting up and mounting on cards, can be had from the Library. A subscription of 5s. covers a year's issues.

All the journals received in the Library (about 200) are indexed, reference being made to all important articles and illustrations so that subscribers can have a constantly expanding index to practically every type of building illustrated in the architectural journals of the world.

Members wishing to have reprints of previous issues can do so on payment of 3d. per issue to the Librarian Editor.

It is hoped to print them on gummed paper as soon as a large enough number of members subscribe.

SCHOOLS

ARCHITECTS' JOURNAL. *1938. 3 and 10 March. P. 415.*
Senior Schools. Plan units—Gymnasia.

ARCHITECTURAL RECORD (NEW YORK). *1938. February. P. 54.*
School planning for changing curriculum needs.

ARCHITECTURAL FORUM (NEW YORK). *1938. February. P. 137.*
Columbia High School, by Overstreet & Town. Gymnasium —auditorium has separate entrance for use as social centre. High School, Fruita, California : an interesting brick building, by T. H. Buell & Co.

UNIVERSITIES AND COLLEGES

ARCHITECTURE ILLUSTRATED. *1938. February. P. 32.*
New buildings for the Society of Oxford Home Students, by Sir Giles Gilbert Scott [*P.P.*].

ARCHITECTURE ILLUSTRATED. *1938. February. P. 42.*
The Laurence wing, Froebel Educational Institute Training College for Women, Roehampton Lane, by Verner O. Rees [*F.*]. Reinforced concrete frame and brick walls.

LABORATORIES

R.I.B.A. JOURNAL. *1938. 7 March. P. 440.*
ARCHITECTURAL REVIEW. *1938. March. P. 117.*
Research laboratories for I.C.I. at Blackley, Manchester, by Serge Chermayeff [*F.*]. A new type of industrial building, fully air-conditioned. The latter journal reviews the building in an article by R. A. Cordingley on the role of the architect in building for industry.

ARCHITECT AND BUILDING NEWS. *1938. 25 February. P. 255.*
Material testing station at Leghorn, by G. Palanti.

ARCHITECTURAL RECORD (NEW YORK). *1938. February. P. 38.*
Sanitation research laboratory, New York. A building for the study of sanitary engineering, by A. B. Bauer.

MUSEUMS AND EXHIBITIONS

ARCHITECTURAL REVIEW. *1938. March. P. 109.*
A pictorial record of the MARS group exhibition of the elements of modern architecture, including a note of appreciation by Le Corbusier.

R.I.B.A. JOURNAL. *1938. 24 January. P. 290.*
The MARS group exhibition. Some considerations of exhibition technique.

BULLETIN TECHNIQUE DE LA SUISSE ROMANDE (LAUSANNE). *1938. 12 February. P. 45.*
Article on the lighting of museums.

BAUGILDE (BERLIN). *1938. 25 February. P. 171.*
New art gallery in Basel, by R. Christ and P. Bonatz.

LIBRARIES

ARCHITECTURAL REVIEW. *1938. March. P. 135.*
Norris Green Branch Library, Liverpool, by L. H. Keay [*F.*].

LIBRARY ASSOCIATION RECORD. *1938. February. P. 65.*
Ruislip Barn Library and Aspley Branch Library.

RADIO

ARCHITECTURAL FORUM (NEW YORK). *1938. February. P. 147.*
Broadcasting studios, Sioux Falls. A small suite in an existing building. A. Spitnagel, architect.

CIVIC

R.I.B.A. JOURNAL. *1938. 7 February. P. 342.*
Manchester City Police Headquarters, by G. Noel Hill [*F.*].

HOTELS AND RESTAURANTS

ARCHITECTURE ILLUSTRATED. *1938. February. P. 39.*
Chez Laurie, New Road House, Thanet Way, Herne Bay, by W. M. Bishop.

ARKKITEHTI (HELSINGFORS). *1938. No. 1. P. 14.*
Tourist hotel and restaurant on the shore of Lake Vanajavesi. Accommodation for 500 guests. Architects : Blomstedt and Lampén.

ARCHITETTURA (MILAN). *1938. January. P. 17.*
San Pietro restaurant at Genoa, by M. Labo. A modern brick and reinforced concrete building.

OFFICES

ARCHITECT AND BUILDING NEWS. *1938. 25 February. P. 245.*
The Cambridge University Press, Euston Road, by W. Curtis Green, R.A., & Partners.

ARCHITECTURAL FORUM (NEW YORK). *1938. February. P. 149.*
Two branches of Chase National Bank at Rockefeller Plaza, N.Y.C., by Reinhard & Hofmeister.

ARKITEKTEN (COPENHAGEN). *1937. Nos. 11-12. P. 153.*
Issue devoted to new branch banks. Excellent examples of modern bank fittings and interiors.

SHOPS

ARCHITECTURAL REVIEW. *1938. March. P. 137.*
Extension to a co-operative store, Huddersfield, by W. A. Johnson and J. W. Cropper.

ARCHITECTURAL FORUM (NEW YORK). *1938. February. P. 155.*
Planning technique of furniture shops.

INDUSTRIAL

R.I.B.A. JOURNAL. *1938. 7 March. P. 421.*
The Architectural Work of the Miners' Welfare Committee. Paper by J. H. Forshaw [*F.*].

ARCHITECTURAL FORUM (NEW YORK). *1938. February. P. 133.*
Campana Factory, Batavia, Illinois, by Chase, Childs & Smith. Terra-cotta facing and striking use of glass blocks.

ARKKITEHTI (HELSINGFORS). *1938. No. 1. P. 1.*
New Customs warehouse at Katajanokka, by G. Taucher. A good modern quayside building. Reinforced concrete frame, brick walls.

AMERICAN ARCHITECT (NEW YORK). *1938. February. P. 29.*
Norris Dam and power house. Principal architect, R. Wark. A large engineering structure with dramatic architectural quality.

TRANSPORT AND BRIDGES

BAUKUNST (BERLIN). *1938. March. P. 81.*

BAUWELT (BERLIN). *1938. 3 March. Supplement. P. 1.*
The new airport, Tempelhof, Berlin, by E. Sagebiel. Progress photos of the buildings under construction and photographs of a model showing the proposed terminal buildings.

CASABELLA (MILAN). *1938. February. P. 6.*
Forlanini Airport, Milan. A magnificent group of buildings, by L. Giordani.

PENCIL POINTS (NEW YORK). *1938. February. P. 109.*
The æsthetics of bridge design, by Aymar Embury. The article includes interesting examples of design in concrete where attempt has been made to express the action of the forces within the several distinct masses.

WELFARE AND COMMUNITY BUILDINGS

ARCHITECT AND BUILDING NEWS. *1938. 4 March. P. 273.*
St. Michael's Club House, Elizabeth Street, S.W. A building, by N. F. Cachemaille-Day [*F.*], designed to serve the many social needs of a London church.

BUILDER. *1938. 11 March. P. 497.*
Community and Social Centre, Tachbrook Estate, S.W. The building provides club accommodation for a recently completed housing scheme. Architect: F. Milton Harvey [*A.*].

ARCHITECTURAL RECORD (NEW YORK). *1938. February. P. 68.*
Article on Health Centres for Preventive Medicine, Recreation and Education, by F. K. Safford.

HOSPITALS, ETC.

ARCHITECTS' JOURNAL. *1938. 10 March. P. 403.*

BUILDER. *1938. 11 March. P. 493.*

ARCHITECT AND BUILDING NEWS. *1938. 4 March. P. 278.*

BUILDING. *1938. March. P. 94.*
New Westminster Hospital. Nurses' home and medical school block. The first of two large buildings by Adams, Holden and Pearson [*FF.*].

ARCHITECTURAL REVIEW. *1938. March. P. 1[illegible].*
The Kent and Canterbury Hospital, by Cecil Burns. 181 patients; separate nurses' home with 97 bedrooms. Reinforced concrete construction.

BUILDER. *1938. 11 March. P. 489.*
Paying Patients Home, Manchester Royal Infirmary, by Thomas Worthington & Sons [*FF.*].

ARCHITECTS' JOURNAL. *1938. 3 March. P. 365.*
Auxiliary hospital and convalescent home, Canniesburn, by James Miller & Son. 66 beds, mostly single bed wards for paying patients.

ARCHITECTURAL RECORD (NEW YORK). *1938. February. P. 58.*
Article on planning a physician's office, with three examples of buildings for doctors with minor hospital or clinic facilities.

NOSOKOMEION (STUTTGART). *1938. No. 1. P. 13.*
Article in English on provision for mental diseases in the general hospital, with plans of 3, 7, 11 and 16 bed wings for psychiatric cases.

THE KENTIKU SEKAI (TOKYO). *1937. December. P. 1.*
Tokyo Teisin Hospital and Katayama Hospital.

SPORTS BUILDINGS

ARCHITECT AND BUILDING NEWS. *1938. 25 February. P. 249.*
A new restaurant at Wembley Stadium, by Sir E. Owen Williams. Tables are arranged on three tiers at the top of the grandstand facing the arena through a glass partition.

AMERICAN ARCHITECT (NEW YORK). *1938. February. PP. 25 and 53.*
Recreational and sports buildings, Central Mall, Jacob Riis Park, N.Y.
Ski station and aerial railway, Innsbruck, Austria.

RELIGIOUS BUILDINGS

R.I.B.A. JOURNAL. *1938. 21 February. P. 398.*
St. Albans Church, Lakenham, Norwich, by C. Upcher [*F.*]. Traditional flint walls with brick dressings.

DESIGN AND CONSTRUCTION. *1938. February. P. 59.*
Special section on churches and religious buildings. Article by B. A. Miller [*F.*] on Design of the Modern Church.

L'ARCHITECTURE REVUE MENSUELLE (PARIS). *1938. 15 February. PP. 37 and 47.*
Church of Sainte-Odile, Paris, by M. J. Barge. An unusual plan results from a narrow site obtaining light from one side only. The interior contains interesting decorative brickwork and a large crypt is provided under the long nave and chancel. A number of churches by Henri Vidal, some of which show adaptations of a standard entrance façade and all a vigorous use of masonry or brickwork and well-studied proportion.

DOMESTIC BUILDINGS

R.I.B.A. JOURNAL. *1938. 24 January. P. 293.*
A reinforced concrete house in a Surrey park, by Raymond McGrath [*A.*].

L'ARCHITECTURE D'AUJOURD'HUI (PARIS). *1938. January. P. 43.*
Modern houses in England, by Gropius & Fry, Lubetkin &

Tecton, and Connell, Ward & Lucas. Many examples of houses in America and Europe are also given in this issue.

ARCHITECTURAL REVIEW. *1938. March. P. 133.*
Dolphin Square, Grosvenor Road, by Gordon Jeeves [*F.*]. A group of 1,200 flats built round a central square containing a sports centre, with swimming bath, squash courts, etc.

BUILDER. *1938. 11 March. P. 501.*
Flats with air-raid shelter, Princes Gate, S.W., by Adie, Button & Partners.

TÉR ÉS FORMA (BUDAPEST). *1938. Nos. 1-2. P. 30.*
A block of flats, well illustrated with drawings showing good general planning, details of kitchen and bathroom equipment, construction of foundations, sound insulation, and sectional details of metal windows showing placing of roller blinds and radiators. The building contains a restaurant and attractive roof garden.

FARMS

R.I.B.A. JOURNAL. *1938. 21 February. P. 373.*
Buildings connected with the dairying industry. Milk treatment, pasteurisation, bottle filling, canning, etc. Also notes on dairies for the manufacture of cheese and butter. This article is the second portion of a Final Examination Thesis by I. M. Williams [*A.*].

MATERIALS

ARCHITECT AND BUILDING NEWS. *1938. 4 March. P. 282.*
An article on cedar wood shingles.

ARCHITECTURAL FORUM (NEW YORK). *1938. February. P. 165.*
Steel, plywood and concrete as materials for prefabricated houses.

CONSTRUCTION

BUILDING. *1938. March. P. 121.*
Comparative costs. Standard wood and metal casement, by R. V. Boughton.
Thermal and sound insulation in walls and partitions with a cost-efficiency analysis, by C. W. Glover.

EQUIPMENT, SANITATION, ETC.

ARCHITECTS' JOURNAL. *1938. 10 March. P. 419.*
Information supplement on refrigeration.

ARCHITECTURAL RECORD (NEW YORK). *1938. February. P. 72.*
The effect of air-conditioning on the planning of buildings and the shape of rooms.

AMERICAN ARCHITECT (NEW YORK). *1938. February. P. 69.*
Automatic heating and air-conditioning. Systems, equipment and design. An important technical survey by Graham Ford, continued from the January issue.

DER BAUMEISTER. *1937. No. 6. Supplement. P. 121.*
Position and shape of windows and the illumination of rooms.

JOURNAL OF THE INSTITUTE OF HEATING AND VENTILATING ENGINEERS. *1938. February. P. 538.*
Air-conditioning factors. An important paper by Thomas Chester.

JOURNAL OF THE ROYAL SANITARY INSTITUTE. *1938. March. P. 535.*
Three papers on the subject of recent advances in methods of bed-bug disinfestation.

LAW

THE STRUCTURAL ENGINEER. *1938. March. P. 111.*
The Development of Construction under the London Building Acts. Paper by H. G. Castleman. An historical survey of the development of the statutory control of construction.

BIOGRAPHICAL

ARCHITECTURAL REVIEW. *1938. March. P. 141.*
Arthur H. Mackmurdo, a pioneer designer whose evolutionary importance lies between Morris and C. F. A. Voysey. A biographical article by N. Pevsner.

PENCIL POINTS (NEW YORK). *1938. February. P. 67.*
A survey of the work of Holabird & Root, architects of the U.S. Forest Products Laboratory, Madison; Chicago skyscraper offices are illustrated among many other examples of this firm's interesting work, which includes industrial design.

DECORATION

ARCHITECTURAL REVIEW. *1938. March. P. 151.*
Repetition in decoration. The development of a new technique of interior decoration.

HOUSING AND TOWN PLANNING

R.I.B.A. JOURNAL. *1938. 7 February. P. 337.*
The control of design under town planning. A memorandum with correspondence thereon between the Minister of Health and the R.I.B.A.

ARCHITECTURAL FORUM (NEW YORK). *1938. February. P. 110.*
Large-scale housing in America. Compact survey of present problems and possibilities.

JOURNAL OF THE TOWN PLANNING INSTITUTE. *1938. February. P. 110.*
The Planning of a County. Paper by W. R. Davidge [*F.*]. An appendix gives an analysis of the action being taken by English County Councils with regard to planning.

GENERAL

L'ARCHITECTURE D'AUJOURD'HUI (PARIS). *1938. January. P. 2.*
A general survey of the position of architecture, in the United States, the beginnings of a real American style under the influence of Hood, Lescaze, Neutra and others; lessons for Europe in a slum-clearance programme which maintains cheap rents; a study of highly organised building technique developed for skyscraper construction. Extracts from Le Corbusier's "Quand les Cathedrals étaient blanches" and an article by R. Neutra on Architecture and Standardisation are included. Examples are given of American schools, factories, housing, etc., etc.

PENCIL POINTS (NEW YORK). *1938. February. P. 99.*
A contemporary American style. Some notes on its qualities and its dangers, by Talbot Hamlin.

ARCHITECTURAL REVIEW. *1938. March. P. 127.*
The Garden in the Modern Landscape, by Christopher Tunnard. The article includes a graphic summary of the development of the garden at St. Anne's Hill, Chertsey, over a period of 200 years.

STAVBA (PRAGUE). *1937. No. 4.*
An issue devoted to modern architecture in England. Article by F. R. S. Yorke, with many illustrations of well-known contemporary work.

Correspondence

COMPETITIONS

Madras,
S. India.
3.3.38

To the Editor, JOURNAL R.I.B.A.

SIR,—A perusal of the Competition Notices published on pages 366 and 367 of the R.I.B.A. JOURNAL of 7 February 1938, which presumably are fairly typical of such Notices, discloses remarkable differences of opinion on the part of the promoters as to the sources from which they wish to obtain designs.

The St. George's Hospital authorities desire designs from architects practising in the United Kingdom and Northern Ireland; Chester and Dundee from architects of British nationality practising in the United Kingdom only; Wood Green from architects of British nationality (practising anywhere presumably). Redcar and Yeovil extend their invitations to "architects," presumably of any nationality and practising anywhere. The Dun Laoghaire Corporation limit their competition to architects practising in the Irish Free State. In all cases the Assessors are members of the R.I.B.A. and presumably were appointed, or recommended, by the R.I.B.A.

None of the Notices makes any attempt to define the word "Architect"; the terms "Registered Architect," "Chartered Architect," for instance, are in no case used. Possibly the Conditions of the Competitions deal with this important point, important because it is understood that in Great Britain the term "Architect" now carries with it no guarantee of any professional knowledge.

It will be noted that architects of British nationality practising in the Irish Free State or the Dominions are precluded from submitting designs for the St. George's Hospital, whereas foreign architects practising in Great Britain, and a number settled in England a few years ago, are entitled to do so.

This Competition is one of the most important held in recent years, the building being a very large one to accommodate one of our most important institutions, and is situated on an exceptionally prominent site. It would be interesting to know whether the R.I.B.A. has had any voice in an arrangement which prevents so large a number of its members from taking part in this important Competition and for which the time allowed for preparation of designs is ample to allow of their competing.

It may not be out of place to mention that London architects were permitted to compete for the Sydney Cathedral and did so successfully.

Apart from the St. George's Hospital Competition, where Dominion and Irish Free State architects seem to have suffered, it will, I think, be agreed that the other cases cited show an extremely divergent manner of drawing up conditions governing entries.

Presumably the R.I.B.A., either directly or through Assessors, is in a position to obtain a more logical system, and it would be interesting to know what steps, if any, have been taken, or can be taken, to this end.

I take it that one of the main objects of Open Competitions is to give as many qualified people as possible an equal chance of success by merit. I suggest, therefore, that the R.I.B.A. and Assessors should advise against limitation unless there is some special reason, and that limitation when found necessary should be arranged on some definite system. Reasonable individual wishes of promoters must of course be respected. Obviously World or Empire Competitions are not required for minor schemes, and most medium-sized Competitions are probably best limited to Great Britain and Ireland, but there would seem to be no reason for excluding the Irish Free State from such except on political grounds, which the R.I.B.A., in view of its recent attitude towards foreign architects in England, would seem not to countenance. Surely all major Competitions such as the St. George's Hospital Competition should be open to the Empire?

When Competitions are advertised as open to the Empire care should be taken to see that sufficient time is allowed for receipt and preparation of designs. This, I believe, was not done in the case of the *News Chronicle* Schools Competition, although that paper featured the Competition as open to the Empire.

In cases where limitation is necessary, territorial limitation is probably in most cases the most satisfactory, but should not the territory be some town or county or district where the inhabitants are bound together by special ties of local interests or patriotism? I seem to remember that in a recent case an arbitrary limit of a 200-mile radius from the site of the building was made. I believe the absurdity of this was pointed out at the time in the professional press.

The views in this letter are expressed without any knowledge of the part the R.I.B.A. can play, or has or has not played, in advising promoters on the points I have raised. A statement in this JOURNAL by the Chairman of the Competitions Committee would, I feel sure, be of great interest to others besides myself.

R. JACKSON [*F.*]

HOMO SAPIENS

Bridge House,
Welwyn, Herts.
13.3.38

To the Editor, JOURNAL R.I.B.A.

SIR,—It is far from clear in your editorial comment on the A.A.S.T.A. Essay Competition whether the "essayist" who "conjured up an array of sinister principals determined on nothing so much as to line their own pockets" is to be identified with the "essayist" (myself) whose figures of the R.I.B.A. Council Membership have since been corrected by a letter in the Press from the R.I.B.A. Secretary.

May I be permitted to explain that I am not in the habit of assessing assistants and principals, knights and editors, otherwise than by the standards averagely applicable to the species *homo sapiens*? My belief is not in professional and social superficialities but in the recognition of human motives as they come within the field of philosophy and psychology.

For instance, I observe that architects, in common with other people, fail to distinguish between our faculty of indifference (an essential part of our nature) and our indifference to indifference, which is merely our refusal to recognise what, in fact, we are like. Let me try to make the point clear in its special reference to architecture. Architecture offers us much about which, sooner or later, we can and do agree. It also offers us much about which we cannot and never shall agree. The first category is in terms of *use* or *function* ("commodity and firmness"). The second category is in terms of *value* ("delight"). In terms of the first category,

we can and do make genuine *communications*, capable of verification. I can, for instance, assert that if doors and windows fit badly a room will be draughty. But I cannot equally assert what shape and colour of door and window will best enhance any given room. If I do, my intention is not to make a genuine communication but to evoke an *emotional* response. Assume that I take so hazardous a step, and, *mirabile dictu*, that someone agrees with me. Need that agreement, if acted upon, be essentially reliable? Could a forecast be made, based upon it, in any reasonable confidence that it would prove true? Obviously not. The fact, for instance, that I like ginger-beer and sausages does not make it in the least necessary that because you also happen to like ginger-beer you will also appreciate the virtue of sausages. Which being so, I am without any right to believe that you and I like ginger-beer *in the same way*.

Where does this lead? It leads to the issue that we do not in the least mind *not* making a genuine communication when we venture upon an assertion of value. In liking a certain moulding or proportion, it does not matter a jot to us that agreement, or disagreement, with our taste may be merely misleading. It is our nature to be like that. But, if we desire not to make boors of ourselves (this is as near as I can get to your "sinister array of principals") we cannot but be scrupulously concerned to observe that our indifference does not itself become the object of our indifference. The question how are we—the members of the architectural profession—to co-operate in matters of taste as distinct from matters of fact, must be constantly before us. Is it constantly before our contemporary architectural leadership? I cannot observe that it is. On the contrary, the true scope and purpose of the finesse and subtlety of human relationships which is called for seems to have been thrust aside, and in its place to have been imported all the humbug and crudity of an external commercial standard.

Yours faithfully,

MALCOLM MACTAGGART [*L.*]

OBITUARIES

Owing to pressure on our space we regret that it is necessary to hold over the few outstanding obituaries until the next number.

ALLIED SOCIETIES' ACTIVITIES

The architectural dining-out season is now in full swing, particularly, it seems, in the North of England. Dinners at Leeds, Manchester and Liverpool have all been held recently. The President's Leeds speech was reported in the last JOURNAL. For this dinner the **West Yorkshire Society** attracted 370 people, the largest company, so we are told, ever present at an Allied Society dinner. Mr. G. W. Atkinson (President of the Society) was in the chair. Unfortunately Lord Halifax, who was to have been present, was prevented by his political businesses from attending, also Mr. Goodhart-Rendel, who was indisposed, had to stay away, but his speech was read by Sir Ian MacAlister. Mr. Atkinson proposed the toast of "The Municipalities in Our Province," which was replied to by the Lord Mayor of Leeds. Professor Hamilton Thompson, deputising for Lord Halifax, proposed "The R.I.B.A.," Mr. Goodhart-Rendel's speech was in reply. Sir Ian MacAlister proposed "Success to the Registration Bill," and Mr. Norval Paxton replied. "The Guests" was proposed by Mr. Eric Morley [*F.*], and County Alderman W. B. Cartwright replied and made the encouraging announcement that the West Riding C.C. is prepared to offer a quarter of a million pounds of work to architects in building schools and that, if they were satisfied, another quarter of a million pounds worth would follow.

At Liverpool on 3 March Mr. B. M. Ward [*F.*] presided over a large dinner of the **Liverpool Architectural Society.** Among the guests, in addition to Mr. Goodhart-Rendel, who proposed "The Society," were Sir Ian MacAlister, the Lord Mayor and Lady Mayoress, Dean Dwelly, and distinguished representatives of every side of Liverpool life. In his speech Mr. Goodhart-Rendel referred to the pleasure for him in for once being able to propose the toast of a society instead of, as usual, having to reply for the R.I.B.A.: "a proposer by immemorial English tradition is under no obligation of relevance whatever!" But that was merely by the way because, as usual, the President was both relevant and witty. He referred to the age of the Society, to the obligations it shared with the R.I.B.A. to educate the public, architects and students, and instanced the way in which the R.I.B.A. exhibitions, the registration policy and competitions all were aspects of the way the Institute and its Allied Societies were fulfilling these obligations. Mr. Ward replied for Liverpool and described the President as the most useful president the Institute had had in its history of 103 years.

At the dinner Mr. H. J. Rowse [*F.*] was presented with the bronze medal and diploma awarded by the R.I.B.A. for the building of most outstanding merit erected in the Liverpool Society's province during the past five years—the Mersey Tunnel Ventilating Tower at Woodside. Mr. Gilbert Fraser [*F.*] proposed "The Guests" and Mr. G. E. Castle (President of the Incorporated Law Society of Liverpool) replied.

The **Manchester Society of Architects** dinner was on 28 February. Unfortunately this was another dinner which Mr. Goodhart-Rendel was prevented by ill-health from attending, but, as at Leeds, his speech was read by Sir Ian MacAlister. Mr. W. A. Johnson, the local President, who proposed "The R.I.B.A.," made a number of extremely relevant comments on the attitude of the city and its authorities to architectural matters, notably with reference to its aerodromes.

Mr. Goodhart-Rendel, in his reply, said that Manchester was the first city he had ever lectured in—that was at Mr. Hubert Worthington's request. He remembered, he said, meeting with a little polite incredulity when he claimed to have observed the changes in architecture for twenty years, but the claim was true, even if it did involve him having begun his career as an architectural observer at the age of 12! He talked about registration and education, and the public response to publicity campaigns, such as the R.I.B.A. exhibitions. He was prepared without any disguise to urge that we should "use more architecture," but the R.I.B.A. and the Manchester Society were not formed for professional advantage only: there was not, and must never be, anything that could possibly be called an architectural ring. Other speakers were the Lord Mayor, Mr. C. G. Agate [*F.*], Mr. J. R. Adamson [*F.*], and Mr. John Coatman (North Regional B.B.C. Director).

The **Northern Architectural Students' Association** Congress at Liverpool from 17-19 February was attended by members from six schools in the North, with visitors from the A.A., Glasgow and Cardiff. At the general meeting the formation of Southern and Scottish associations on the same lines was planned. This is now under way as a preliminary to a national association for all architectural students. It was recommended that the Association should co-operate more closely with the R.I.B.A., the A.A.S.T.A. and the National Union of Students.

Two reports were read at this meeting: one on the Building Industry, the other on School Training.

The exhibition of work from foreign schools was very attractive. In most cases traditional influence was strong in early years and

later a contemporary interpretation flavoured by the work of the atelier master. A competition for a timber house promoted by the T.D.A. was criticised by Mr. G. Langley Taylor, who awarded the first prize to H. Penn and W. I. Grimsditch, of Liverpool, with Sam Brown (Leeds) second.

The Association was encouraged by the Lord Mayor (Ald. Cory Dixon), the Vice-Chancellor of the University, Professor Holford, and Mr. B. M. Ward in speeches at various functions. The happy relations of the Association with the Liverpool Architectural Society and the very valuable support of Professor Budden throughout the arrangement of the congress augur well for the future.

The guest of honour was Mr. Maxwell Fry [*A.*], who spoke on "Tendencies in Contemporary Architecture."

The 19th annual general meeting of the Western Branch of the **South Wales Institute of Architects** was held at the Hotel Metropole, Swansea, on Monday, 28 February.

The meeting was presided over by the chairman of the branch, Mr. G. R. Hubert Rogers [*L.*], and a large number of members attended from all parts of West Wales.

The following officers were elected for the year :—Mr. Frederick A. Broad, F.S.I. [*L.*], Deputy Borough Architect, Swansea, was elected Chairman ; Mr. J. Herbert Jones [*F.*], Hon. Secretary ; Mr. Oliver S. Portsmouth [*F.*], Hon. Treasurer.

The results of the Students' Competitions were announced and a detailed criticism was made by Mr. E. E. Morgan [*F.*], who acted as Assessor. A prize value £3 3s. was awarded to Mr. Benjamin T. Llewellyn, Swansea, for a set of measured drawings of the "Old Guildhall, Swansea." A prize value £2 2s. was awarded to Mr. J. Francis Sturdy, Swansea, for a set of nine pencil sketches. A prize value £3 3s. was awarded to Mr. Godfrey E. Mortimer for a design for "Homes for Aged People."

At a meeting in February of the **Birmingham and Five Counties Architectural Association** Mr. Pointon Taylor [*F.*] lectured on The Planning of Buildings for Public Health. Assuming good housing as being the most important factor, he went on to deal with what he called the ancillary buildings, illustrating their uses by following the career of an imaginary citizen from pre-natal clinic to mortuary, thus dealing with almost all the buildings local authorities provided in their attempt to raise the standard of public health.

Mr. Anthony Minoprio [*A.*] read a paper on 10 February to the **Sheffield, South Yorkshire and District Society** on the Small Hospital. He gave a most detailed and informative lecture which covered the functions of the cottage hospital, site, finance, programme, plans, especially ward planning, general equipment, construction, sound insulation and sources of information on small hospital planning available to architects.

On 2 March the **Central Branch of the South Wales Institute** and the Welsh School of Architecture, Cardiff, paid a visit to the new building for the Welsh Board of Health, Cathays Park, Cardiff, the first Government building of its kind to be erected in Wales. The architect is Mr. P. K. Hanlon, O.B.E. [*F.*].

Membership Lists

ELECTION TO MEMBERSHIP 7 MARCH 1938

In accordance with the terms of Bye-laws 10 and 11, the following candidates for membership were elected at the Council Meeting held on Monday, 7 March 1938.

AS HON. ASSOCIATES (6)

BARRON : THOMAS, J.P., Glasgow.
BARTON : JOSEPH EDWIN, M.A.Oxon, Bristol.
FORSDYKE : SIR JOHN, K.C.B., M.A., F.S.A.
QUENNELL : MRS. MARJORIE.
SIMON : SIR ERNEST DARWIN, M.A., M.Inst.C.E., Manchester.
WHISTLER : REX JOHN.

AS FELLOWS (7)

BANFIELD : ERNEST WILLIAM [*A.*1901].
BOWER : STEPHEN ERNEST DYKES, M.A.Oxon, A.A.Diploma [*A.*1931].
LEICESTER : OSBORNE HOWARD [*A.*1928].
MAUGER : PAUL VICTOR EDISON, M.T.P.I. [*A.*1922].
ROSS : WILLIAM, F.S.I. [*A.*1923], Glasgow.

And the following Licentiate who has passed the qualifying Examination :—

HICK : ALLANSON, Hull.

And the following Licentiate who is qualified under Section IV, Clause 4 (c) (ii) of the Supplemental Charter of 1925 :—

MARTEN : WILLIAM HENRY HERBERT, Leeds.

AS ASSOCIATES (11)

ALEXANDER : PHILIP MOORE [Passed five years joint course at the School of Architecture, Cambridge University and the School of Architecture, Victoria University, Manchester. Exempted from Final Examination], Timperley, Cheshire.

GARNOCK JONES : ALAN PETER, Dip.Arch.(L'pool) [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], Liverpool.

GAVIN : IAN SINCLAIR [Passed five years' course at the School of Architecture, Edinburgh College of Art. Exempted from Final Examination], Edinburgh.

GLOVER : JOHN HARDIE, Dip.Arch.Edin. [Passed five years' course at the School of Architecture, Edinburgh College of Art. Exempted from Final Examination], Edinburgh.

JONES : ANTHONY WILSON [Passed five years' course at the School of Architecture, Victoria University, Manchester. Exempted from Final Examination], Knutsford, Cheshire.

JOSEPH : PETER LESLIE [Passed five years' course at the Birmingham School of Architecture. Exempted from Final Examination].

LLOYD : KENNETH ALFRED [Passed five years' course at the Birmingham School of Architecture. Exempted from Final Examination], Oaken, Staffs.

MORTON : KENNETH, B.A.(Arch.) [Passed five years' course at the Department of Architecture, University of Sheffield. Exempted from Final Examination], Sheffield.

PATE : DAVID MCLEAN [Special Final Examination].

TARBOLTON : NORMAN ERIC [Passed five years' joint course at the School of Architecture, Cambridge University and the Bartlett School of Architecture, University of London. Exempted from Final Examination], Birmingham.

WALKER : ALAN WENDELL, B.Arch. [Passed five years' course at the School of Architecture, McGill University, Montreal. Exempted from Final Examination].

AS LICENTIATES (5)

BOSPIDNICK : RICHARD GEORGE.
GRAY : JAMES TAYLOR.
JOEL : DUDLEY WATKIN.
PYMAN : NOEL, Leeds.
STEVENS : ERIC GORDON.

APPLICATIONS FOR MEMBERSHIP

ELECTION : 4 APRIL 1938

In accordance with the terms of Bye-laws 10 and 11, an election of candidates for membership will take place at the Council Meeting to be held on Monday, 4 April 1938. The names and addresses of the candidates, with the names of their proposers, found by the

Council to be eligible and qualified in accordance with the Charter and By-laws are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary R.I.B.A. not later than Thursday, 31 March 1938.

AS HON. ASSOCIATE (1)

ROBERTS : HARRY WILLIAM, 29 London Road, Ipswich. Proposed by the Council.

AS FELLOWS (7)

CHALLICE : JOHN [*A.*1922], 7 Bedford Circus, Exeter ; Four Winds, Exton, near Exeter. Proposed by John Bennett, A. Southcombe Parker and H. V. Hague.

EDWARDS : JOHN RALPH [*A.*1919], 7 Unity Street, College Green, Bristol ; 8 Harley Place, Clifton, Bristol, 8. Proposed by G. D. Gordon Hake, Sir George H. Oatley and W. J. Stenner.

LINDO : HAROLD WALTER EUSTACE [*A.* 1927], 115 Old Broad Street, E.C.2 ; 16 Burnham Court, Moscow Road, W.2. Proposed by M. E. Collins, Howard Robertson and Owen H. Collins.

PRYKE : LOUIS EDWARD [*A.*1901], County Hall, S.E.1 ; 16 Luttrell Avenue, Putney, S.W.15. Proposed by E. P. Wheeler, Fredk. R. Hiorns and Edwin Williams.

SEDDON : JOSEPH [*A.*1909], King's Buildings, Dean Stanley Street, S.W.1 ; "Capella," Parkway, Gidea Park, Essex. Proposed by Harry Redfern, Basil Oliver and T. M. Wilson.

STEWART : CUTHBERT BERTRAM [*A.*1919], 123 London Road, Headington, Oxford ; 31, Stephen Road, Headington, Oxford. Proposed by N. W. Harrison, Thomas R. Milburn and W. Milburn.

And the following Licentiate who is qualified under the provisions of Section IV, Clause 4 (c) (ii) of the Supplemental Charter of 1925 :

BARKER : BREVET COLONEL HAROLD WOOD, O.B.E., T.D., Midland Bank Chambers, Bradford ; 4 Oak Mount, Manningham, Bradford. Proposed by Eric Morley, B. A. Gribbon and T. Butler Wilson.

AS ASSOCIATES (86)

ADAMSON : COLIN KEITH, B.A.Cantab [Final], 52 Luttrell Avenue, Putney, S.W.15. Proposed by P. A. W. Roffey, A. L. N. Russell and Matthew J. Dawson.

AKED : LESLIE WILLIAM [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], c/o Messrs. Mitchell & Bridgwater, 42 Bruton Place, Berkeley Square, W.1 ; 42 Chalfont Road, Allerton, Liverpool 18. Proposed by Professor Lionel B. Budden, J. Ernest Marshall and Edward R. F. Cole.

AKEROYD : GEORGE FRANCIS EDWARD [Final], 15 Fern Hill Mount, Saltaire, Shipley, Yorks. Proposed by Eric Morley, J. A. Fletcher and Wm. Illingworth.

ALDEN : MISS MURIEL [Final], 17 Ladbroke Square, W.11. Proposed by Chas. J. Mole, J. E. Townsend and Gertrude W. M. Leverkus.

ANDERSON : JOHN MALCOLM MCCLURE [Passed five years' course at the School of Architecture, Edinburgh College of Art. Exempted from Final Examination], 7 Rillbank Terrace, Edinburgh 9. Proposed by A. F. Balfour Paul, H. McClure Anderson and T. Craigie Marwick.

ARMSTRONG : JOSEPH [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], c/o Messrs. Thos. Worthington and Sons, 178 Oxford Road, Manchester 13 ; Clay Hill House, near Gillingham, Dorset. Proposed by Professor Lionel B. Budden, J. Hubert Worthington and Francis Jones.

BARDELL : FRANK STANLEY, B.A.(Hons.) [Special Final Examination], 29 Lynton Avenue, Hatch End, Middlesex. Proposed by Henry Hyams, R. H. J. Mayhew and Professor A. E. Richardson.

BARLEY : ARTHUR LESLIE FRANCIS [Final], 3 Marcus Avenue, Thorpe Bay, Essex. Proposed by Niel Martin-Kaye, D. H. Burles and Percy G. Hayward.

BARROW : ARTHUR [Final], 16 Dunelm, Sunderland, Co. Durham. Proposed by W. B. Edwards, W. W. Tasker and P. Clive Newcombe.

BATT : BERTRAM BEAVER HOLLAND, Dip.Arch.Leeds [Passed five years' course at the Leeds School of Architecture. Exempted from Final Examination], 1 Haynes Road, West Worthing, Sussex. Proposed by Colin Rowntree, Chas. H. Wallis and John Saxon Snell.

BEECHER : DAVID WARD, M.A. [Final], 14 Park End Street, Oxford. Proposed by Thomas Rayson, Julian Leathart and R. Fielding Dodd.

BIDWELL : GEORGE BERNARD HOPSON [Special Final Examination], "Clynton," Yeoman Lane, Bearsted, Kent. Proposed by S. H., Loweth, Maxwell Ayrton and L. Stuart Stanley.

BOND : CEDRIC MEYER [Special Final Examination], 6 Howard Walk, Hampstead Garden Suburb, N.2. Proposed by J. Leighton Fouracre, L. Stuart Stanley and Wilfrid Travers.

BONSALL : RICHARD EMRYS [Final], 4 Marine Terrace, Aberystwyth. Proposed by L. Stuart Stanley, H. O. Corfiato and Matthew Dawson.

BROADBENT : MISS JOAN MARGARET [Final], Berwyn, Highfield, Sale. Proposed by J. Gordon McBeath and the Chairman of Council and the Hon. Secretary of the Manchester Society of Architects.

BROCKLESBY : RICHARD SHEARWOOD [Final], 56a High Street, Wimbledon, S.W.19. Proposed by L. Stuart Stanley, H. O. Corfiato and Matthew J. Dawson.

BROWN : LAWRENCE ARTHUR [Final], "Dashpers," Under Lane, Plymstock, Devon. Proposed by Charles H. Gage, H. Guy Holt and Henry Archibald Douglass.

CAIRNCROSS : JAMES [Passed five years' course at the School of Architecture, Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination], 26 Forfar Road, Dundee. Proposed by R. Leslie Rollo, Chas. G. Soutar and W. Salmond.

CALDER : DOUGLAS WILLIAM MCNAIR [Final], 49 Fairholme Road, West Kensington, W.14. Proposed by Isaac Taylor, Joseph Addison and the Chairman of the Council of the Manchester Society of Architects.

CARTER : FREDERICK HAROLD [Final], 359 Yardley Green Road, Birmingham 9. Proposed by Holland W. Hobbiss, John B. Surman and C. Minors Drewitt.

CHAMBERLAIN : THOMAS LEWIS JOHN [Final], 154 Friar Street, Reading. Proposed by W. Roland Howell, L. Stuart Stanley and R. S. Bowers.

CHIDLEY : LESLIE CLAUDE [Final], 349 Green Lanes, Palmers Green, N.13. Proposed by S. Pointon Taylor, Arch. Scott and Lt.-Col. P. A Hopkins.

CHURCHILL : MISS RUTH [Passed five years' course at the Architectural Association. Exempted from Final Examination], 33a St. Peter's Square, Hammersmith, W.6. Proposed by R. Furneaux Jordan and the President and Hon. Secretary of the Architectural Association under the provisions of Bye-law 3 (b).

CLOKE : SAMUEL DOUGLAS NEIGHBOUR [Final], 31 Bernard Gardens, Wimbledon, S.W.19. Proposed by L. Stuart Stanley, Fredk. R. Hiorns and Edwin Williams.

COOK : SYDNEY ARTHUR GEORGE [Final], 65 Willow Way, Leagrave, Luton. Proposed by T. Talfourd Cumming, E. Steward Smith and W. Roland Howell.

COX : WALTER GUY [Special Final Examination], 78 Hartley Road, North End, Portsmouth. Proposed by A. C. Townsend, R. A. Thomas and applying for nomination by the Council under the provisions of Bye-law 3 (d).

CRAIK : DONALD MCLEOD [Passed five years' course at the Architectural Association. Exempted from Final Examination], 33a, St. Peter's Square, W.6. Proposed by R. Furneaux Jordan and the President and Hon. Secretary of the Architectural Association under the provisions of Bye-law 3 (b).

CRESSWELL : ALBERT EDWARD [Special Final Examination], 20 Park Avenue, N.22. Proposed by Albert E. Kingwell, Verner O. Rees and L. Stuart Stanley.

ERSKINE : RALPH [Passed five years' course at the School of Architecture, Regent Street Polytechnic. Exempted from Final Examination], Skeet Rookery, Givons Grove, Leatherhead. Proposed by Joseph Addison, Edwin Williams and Ewart G. Culpin.

EVANS : THOMAS RANDALL [Final], 4, Tregunter Road, S.W.10. Applying for nomination by the Council under the provisions of Bye-law 3 (d).

FLACK : ARTHUR WALTER [Final], 2 St. Helens Towers, 112 Clarendon Road, Southsea, Hants. Proposed by Ernest J. Thomas, A. C. Townsend and J. W. Walmisley.

FOWLER : JOHN STEWART [Special Final Examination], "Oakmount," Chilworth, Southampton. Proposed by T. Trevor Sawday, E. J. Williams and A. Leonard Roberts.

FRITH : ALFRED GERALD PETTER [Final], 1 West Borough, Wimborne, Dorset. Proposed by John Petter, L. Stuart Stanley and J. N. Randall Vining.

GREEN : EDGAR ARTHUR, Dip.Arch. [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], 28 Lyndhurst Road, Wallasey, Cheshire. Proposed by Professor Lionel B. Budden, J. Ernest Marshall and Edward R. F. Cole.

HANCOCK : GEOFFREY ARTHUR [Final], 40 Brownlow Road, New Southgate, N.11. Proposed by Robert Bennett, Courtenay M. Crickmer and W. A. Ross.

HIGGINS : HENRY GILBERT FREDERICK [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], "The Mount," Bramhall Road, Waterloo, Liverpool 22. Proposed by Professor Lionel B. Budden, Francis X. Velarde and Harold E. Davies.

HODGES : MISS MARY GRAHAM [Passed five years' course at the Architectural Association. Exempted from Final Examination], 96 Ross Road, S. Norwood, S.E.25. Proposed by T. P. Bennett, John W. Spink and L. H. Bucknell.

HOGG : JOHN SINTON [Final], Northumberland House, Lemington-on-Tyne. Proposed by W. W. Tasker, Lt.-Col. A. K. Tasker and Professor R. A. Cordingley.

JACKSON : FRANK [Final], 19 Princes Crescent, Bare, Morecambe and Heysham, Lancs. Proposed by L. Stuart Stanley, H. O. Corfiato and Matthew J. Dawson.

JACKSON : JOHN EDWIN [Final], "South Winds," Seabrook, Hythe, Kent. Proposed by Edwin A. Jackson, H. Anderson and H. Campbell Ashenden.

JEPSON : GEORGE WILLIAM [Final], Flat No. 1, 743 Chester Road, Stretford, near Manchester. Proposed by John Bradshaw Gass, Arthur J. Hope and James R. Adamson.

LANGDON-THOMAS : GORDON JAMES [Passed five years' joint course at the R.W.A. School of Architecture, Bristol, and the Architectural Association. Exempted from Final Examination], 309 Malden Road, New Malden, Surrey. Proposed by T. P. Bennett and the President and Hon. Secretary of the Architectural Association under the provisions of Bye-law 3 (b).

LARKIN : GEORGE ISWAY [Final], 36 Breedon Hill Road, Derby. Proposed by Charles H. Aslin, G. Hanson Sale and T. H. Thorpe.

LEAROYD : BARRY BROOK [Passed five years' course at the Bartlett School of Architecture, University of London. Exempted from Final Examination], 10 Queens Terrace Mews, S.W.7. Proposed by Professor A. E. Richardson, Darcy Braddell and H. O. Corfiato.

LEGGETT : ARTHUR ROBERT EDWARD [Final], 24 Tremaine Road, Anerley, S.E.20. Proposed by L. G. Ekins, Joseph Addison and Thos. E. Scott.

MACRAE : ALASTAIR [Special Final Examination], 54 Sheridan Street, Bradford, Yorkshire. Proposed by J. A. Fletcher, J. Donald Mills and David Smith.

MCGRAW : ANDREW [Special Final Examination], Westburn, Burnbank, Hamilton, Lanarkshire. Proposed by Alex Cullen, A. G. Henderson and William J. Smith.

MASON : EDMUND CHARLES [Final], 6 Pear Tree Lane, Loose, near Maidstone, Kent. Proposed by S. H. Loweth, Thos. E. Scott and Frederick Barber.

MASON : ERNEST [Final], 3 Mount Preston, Leeds, 2. Proposed by H. A. Johnson, G. H. Foggitt and B. R. Gribbon.

MATTHEW : STUART RUSSELL [Passed five years' course at the School of Architecture, Edinburgh College of Art. Exempted from Final Examination], 43 Minto Street, Edinburgh. Proposed by F. C. Mears, John Wilson and Leslie Grahame-Thomson.

MATTHEWS : RONALD HEDLEY [Final], The Vicarage, Swanwick, Ripley, Derby. Proposed by F. W. C. Gregory, A. Trystan Edwards and L. Stuart Stanley.

MEDCALF : ALBERT RUPERT JOHN [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination], "Framley," Willaston, Wirral, Cheshire. Proposed by Professor Lionel B. Budden, Rupert Medcalf and T. B. Medcalf.

MIDDLETON : ALLEN [Final], 49 Fairholme Road, West Kensington, W.14. Proposed by G. Mackenzie Trench, Joseph Addison and the Chairman of Council of the Manchester Society of Architects.

MILNES : CHARLES BRIAN KENDALL [Final], "Wayside," 45 Sutton Road, Bournemouth. Proposed by Henry R. Collins, Philip Hardy and L. Stuart Stanley.

MITCHELL : GEORGE ERIC [Special Final Examination], "Crossways," Cliff Drive, Cromer, Norfolk. Proposed by Arthur Harrison, L. Stuart Stanley and Thos. W. T. Richardson.

MOORE : JOHN ERIC [Passed five years' course at the School of Architecture, Edinburgh College of Art. Exempted from Final Examination], 60 Marchmont Road, Edinburgh. Proposed by James Macgregor, F. C. Mears and Alex. A. Foote.

MOORE : THOMAS ERIC [Final], St. Austell, Colman Avenue, Stubby Lane, Wednesfield, Staffs. Proposed by Francis Jones, Sir Percy S. Worthington and Hubert Worthington.

NEEL : GEORGE EDRIC [Final], 11 Thurlow Road, N.W.3. Proposed by Theodore Fyfe and applying for nomination by the Council under the provisions of Bye-law 3 (d).

PETERSON : ARTHUR FREDERICK [Final], c/o High Commissioner for New Zealand, 415 Strand, W.C. Proposed by L. Stuart Stanley, B. George and E. W. Armstrong.

RAAB : REGINALD ALBERT [Final], 78 North End Road, Golders Green, N.W.11. Proposed by H. S. Goodhart-Rendel, Thos. E. Scott and John Grey.

RANK : JOHN STEPHEN [Final], Borough Engineer's Department, Town Hall, St. Helens, Lancs. Proposed by H. Andrew, Frederick J. Horth and Llewellyn Kitchen.

REDFERN : EWART BRINDLEY [Final], 17 Reservoir Road, Brockley, S.E.4; "Silver Ridge," The Parkway, Trentham, Stoke-on-Trent. Proposed by R. T. Longden, Leonard A. Culliford and Frederick G. A. Hall.

REYNEKE VAN STUWE : HENDRIK WILLEM CAREL, M.A.(Cantab.) [Passed five years' course at the Bartlett School of Architecture, University of London. Exempted from Final Examination], 34 Alwyne Road, Wimbledon, S.W.19. Proposed by Professor A. E. Richardson, H. O. Corfiato and L. Stuart Stanley.

RICHARDSON : JOHN ATHOL [Final], 5 Devonshire Terrace, Lancaster Gate, W.2. Proposed by E. Stanley Hall, J. Murray Easton and Arthur W. Kenyon.

ROBERTS : ERIC ARTHUR [Final], "Bryn Corach," Monks' Lane, Newbury. Proposed by C. B. Willcocks, Oswald P. Milne and Eric Steward Smith.

SALISBURY : JOHN VYVYAN [Final], Little Gables, Harpenden, Herts. Proposed by L. Stuart Stanley and applying for nomination by the Council under the provisions of Bye-law 3 (d).

SEALE : ARCHIBALD FRANK DALLYN [Special Final Examination], Flat 9a, Kingshurst Drive, Preston, S. Devon. Proposed by Vernon Aldridge, A. Southcombe Parker and J. Leighton Fouracre.

SEYMOUR : KENNETH JAMES HYDE [Final], 118 Princes Avenue, W.3. Proposed by Charles Holden, Lionel G. Pearson and Thos. E. Scott.

SHALLIS : ALFRED CHARLES [Final], 9 Rosemont Court, Acton, W.3. Proposed by F. Coutts Webster, F. Hall-Jones and W. A. Ross.

SHUARD : GEORGE WILLIAM [Final], 13 "Eastville," The Vale, Acton, W.3. Proposed by Joseph Addison, L. Stuart Stanley and Edwin Williams.

SMITH : ERNEST DOUGLAS [Final], "Kenilworth," Goodes Lane, Syston, near Leicester. Proposed by George Nott, E. J. Williams and W. J. Prince.

SMITH : FREDERICK WILLIAM [Final], 22 Walcot Buildings, Bath. Proposed by Alfred J. Taylor, Mowbray A. Green and G. D. Gordon Hake.

SMITH : SYDNEY WALTER JOHN [Final], 39 St. James's Street, S.W.1. Proposed by H. Duncan Hendry, Henry Archibald Douglass and Joseph Addison.

SMYTH : LESLIE [Final], 531 Antrim Road, Belfast. Proposed by Thomas Houston, R. Ingleby Smith and R. S. Wilshere.

SQUIRE : RAGLAN HUGH ANSTRUTHER [Final], 23 South Molton Lane, W.1. Proposed by Oswald P. Milne, A. B. Knapp-Fisher and Darcy Braddell.

SUTHERLAND : STEPHEN, Dip.Arch.Abdn. [Passed five years' course at the School of Architecture, Robert Gordon's Colleges, Aberdeen. Exempted from Final Examination], 5 Hornsey Lane Gardens, Highgate, N.6. Proposed by R. Leslie Rollo, E. P. Wheeler and E. G. Bax.

THOMSON : CHARLES ROBERT [Special Final Examination], 34 Ancrum Drive, Dundee. Proposed by J. Donald Mills, Chas. G. Soutar and Wm. Salmond.

TURNER : ERIC HENRY [Final], 33 Melton Road, West Bridgford, Notts. Proposed by F. W. C. Gregory, A. Trystan Edwards and L. Stuart Stanley.

VICKERY : CHARLES RICHARD BLAKE [Passed five years' course at the Welsh School of Architecture, The Technical College, Cardiff. Exempted from Final Examination], 251 Crogan Hill, Barry, Glam. Proposed by W. S. Purchon, T. Alwyn Lloyd and Harry Teather.

VOLLER : RODERIC WALTER [Final], B61 Ducane Court, High Road, S.W.17. Proposed by Maxwell Ayrton, G. Grey Wornum and Edward Maufe.

VOLONTERIO : LOUIS RIGOLA [Final], Corner House Hotel, City Road, Winchester. Proposed by A. Leonard Roberts, Ingalton Sanders and L. Stuart Stanley.

WARD : EDMUND FISHER [Passed five years' course at the Architectural Association. Exempted from Final Examination], 33 Blakemere Road, Welwyn Garden City. Proposed by Major-Gen. Sir John Brown and the President and Hon. Secretary of the Architectural Association under the provisions of Bye-law 3 (b).

WARN : STANLEY WILLIAM [Final], c/o Architect to the Education Committee, Guildhall, Bristol, 1. Proposed by R. Fielding Dodd, Thomas Rayson and Gilbert T. Gardner.

WHITE : BERNARD GEARING [Final], 6 Talbot Square, Lancaster Gate, W.2. Proposed by Niel Martin-Kaye, C. Bouton Smith and John Grey.

WHITE : MRS. MILDRED WHITE [Passed five years' course at the Architectural Association. Exempted from Final Examination], 6 Talbot Square, W.2. Proposed by Niel Martin-Kaye, C. Bouton Smith and John Grey.

WHITTON : ALEXANDER RICHARD, B.A.(Mcr.) [Passed five years' course at the School of Architecture, Victoria University, Manchester. Exempted from Final Examination], 81 Bridport Road, Dorchester, Dorset. Proposed by Professor R. A. Cordingley, W. S. Purchon and W. B. Edwards.

AS LICENTIATES (8)

CALLOW : CLAYTON HAROLD, 47 Havelock Road, Hastings ; 15 The Green, St. Leonards-on-Sea. Proposed by Charles F. Callow, Peter D. Stonham and Henry James Wise.

CONCANEN : THOLEN ALFRED HUGH, c/o Police Architect and Surveyor, New Scotland Yard, S.W.1 ; 110, Burnley Road, Dollis Hill, N.W.10. Proposed by Basil H. Sutton, Leonard A. Culliford and G. Mackenzie Trench.

HAMILTON : MALCOLM JOHN, Air Ministry, Works Directorate, Bush House, Aldwych, W.C.2 ; "Highlees," 26 Russell Avenue, St. Albans, Herts. Proposed by H. P. Burke Downing, Sydney Tatchell and Geo. D. Hamilton.

MARTIN : WILLIAM HORATIO, 164 Corporation Street, Birmingham, 4 ; 5 Melville Hall, Holly Road, Edgbaston, Birmingham, 16. Proposed by Victor Heal and applying for nomination by the Council under the provisions of Bye-law 3 (d).

MOBBS : HEDLEY ADAMS, 18a High Street, Boston, Lincs ; Oulton Lodge, Spilsby Road, Boston. Proposed by W. E. Norman Webster, W. G. Watkins and F. R. B. Haward.

SHACKELL : WILLIAM, Architect's Department, London County Council, County Hall, Westminster Bridge, S.E.1 ; 31 Leyfield, Worcester Park, Surrey. Proposed by E. P. Wheeler, E. G. Bax and Alfd. H. Barnes.

SHIPWAY : GEORGE FREDERICK, County Hall, Westminster Bridge, S.E.1 ; 5 Warminster Road, South Norwood, S.E.25. Proposed by E. P. Wheeler, George A. Lansdown and E. G. Bax.

SMITH : JOHN RICHARD, No. 9 Old Square, Lincoln's Inn, W.C.2 ; No. 2 Church Terrace, Lee, S.E.13. Proposed by T. Phillips Figgis, P. W. Hubbard and W. C. Symes.

APPLICATIONS FOR MEMBERSHIP

ELECTION : 20 JUNE 1938

In accordance with the terms of Bye-laws 10 and 11, an election of candidates for membership will take place at the Council Meeting to be held on Monday, 20 June 1938. The names and addresses of the overseas candidates, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary R.I.B.A. not later than Monday, 13 June 1938.

AS FELLOWS (2)

EAST : HERBERT SPRINGFORD [A.1892], Holyman House, 54 Brisbane Street, Launceston, Tasmania ; "Arnside," Gravelley Beach, River Tamar, Tasmania. Proposed by the Council.

And the following Licentiate who has passed the qualifying Examination :—

EATON : FRANCIS OWEN, "United Buildings," Port Elizabeth ; "Greyhurst," College Drive, Port Elizabeth. Proposed by J. S. Cleland, J. Lockwood Hall and John Perry.

AS ASSOCIATES (4)

COOPER : LESLIE LIONEL [Passed a qualifying Examination approved by the Institute of South African Architects], 91 Main Street, Port Elizabeth, S. Africa. Applying for nomination by the Council under the provisions of Bye-law 3 (d).

JANKS : BERNARD [Passed a qualifying Examination approved by the Institute of South African Architects], 20 London House, Loveday Street, Johannesburg, S. Africa. Proposed by S. C. Dowsett, Robert Howden and W. C. von Berg.

LUNTZ : ABRAHAM [Passed five years' course at the Liverpool School of Architecture, University of Liverpool. Exempted from Final Examination,] 54 Hillbrow Street, Berea, Johannesburg, S. Africa. Proposed by Professor Lionel B. Budden, Ernest Marshall and Edward R. F. Cole.

MOSS : JOHN [Special Final Examination], c/o P.W.D., Jerusalem, Palestine. Proposed by F. W. Foster-Turner, W. J. Price and Major Geo. T. Caryer.

R.I.B.A. PROBATIONERS

The following were enrolled as Probationers of the Royal Institute during the month of February 1938 :—

ALEXANDER : FREDERIC STEVEN, 94 Sunny Gardens Road, Hendon, N.W.4.

ANDREWS : ROLAND, 32 Pelham Street, Mansfield, Notts.

ARMITAGE : EDWARD JOHN, Strand-on-the-Green House, Chiswick, W.4.
BHATTI : ABDUL HAKIM, Head Draughtsman, P.W.D. Hazara Division, Abbottabad, N.W.F.P., India.
BILLINGHAM : WALTER BENJAMIN, 38 Albany Road, Coventry, Warwickshire.
BOUQUET : DAVID GILES, The Chaplain's House, All Saints Hospital, Eastbourne.
BOYLES : CECIL OSMAND TAYLOR, "Rhossili," Wash Water, Newbury, Berks.
BRODIE : RONALD FORDYCE, 4 Woodbine Cottage, Pudsey.
CHAVASSE : JOSEPH RAYMOND, 1 Connaught Road, Wolverhampton, Staffs.
COLLINS : STANLEY FRANCIS, Milburn Lodge, Boars Hill, Oxford.
COLMER : HENRY THOMAS, 66 Wyatt Park Road, Streatham Hill, S.W.2.
CRAMMOND : MAURICE MCPHERSON, 181 High Street, Arbroath.
CREASE : JOHN THOMAS, 13 Morville Street, Bow, E.3.
DALE : GEORGE LESLIE, "White Lodge," Eastfield, Peterborough, Northants.
DALGLEISH : ANDREW MARTIN, Manse, Menymusk, Aberdeenshire.
DEAN : PETER NICHOLAS, Clifton Hotel, Cheddon Road, Taunton.
DOWNS : LESLIE FREDERICK JOHN, 1 Norwood Gardens, Norwood Road, Southall, Mddx.
FARROW : DENIS GEORGE, 40 Crescent Road, Leigh-on-Sea.
GIBSON-HENRY : RODERIC CHALCOTTE ALBERT THOMAS, 90 Moyne Road, Rathmines, Dublin, S.W.1, Ireland.
GRAY : GEORGE THOMAS, 14 Trafalgar Road, Dalston, E.8.
GRINYER : ROY, "Delamere," Broomfield Avenue, Worthing.
HALL : HAROLD GEORGE, 15 Second Avenue, York.
HALLEY : WALTER SAMUEL, "Fairview," Spaneleaze Hill, Loughton, Essex.
HAMMOND : GORDON WILLIAM, The Manse, Derby Road, Gloucester.
HANLY : DAVID PATRICK, 36 Rathgar Avenue, Dublin.
HAZELWOOD : VALENTINE HARRY, "Tobermory," The Rock, Mansfield, Notts.
HEAL : DENYS WILLIAM, Crandon, The Down, Trowbridge, Wilts.
HEARSON : ROBERT ARTHUR FRANCIS, 17 Fairthorne Road, Charlton, S.E.7.
HEMINGWAY : RICHARD, York House, Purston, Featherstone, Nr. Pontefract, W. Yorks.
HENDERSON : JAMES MURIE, "Haugh Cottage," Bothwellhaugh, Bothwell, Lanarkshire.
HIGGS : PETER LESLIE, 51 Shirehampton Road, Stoke Bishop, Bristol 9.
JACKSON : HENRY HUGHES, 21 Imperial House, Grosvenor Road, S.W.1.
JAMIESON : ARCHIBALD THOMAS, 16 Roseneath Place, Edinburgh, 9.
JESSEMAN : ALAN GODFREY, Grange Park, Henleaze, Bristol.
JOBSON : PATRICK ARTHUR, 3 The Meadway, Buckhurst Hill, Essex.
KEARNEY : NORA MAEVE, 2 Clarinda Park E., Dun Laoghaire, Co. Dublin.
KING : RONALD SIDNEY HATTON, 30 Portland Square, Plymouth.
LE HUQUET : GEORGE MICHAEL RODERICK, Connaught Club, W.2.
LORD : CYRIL RAYMOND PERCIVAL, 18 Fara Street, Holyhead, Anglesey.
LOWE : REGINALD IVOR, 106 Cambridge Road, Devonshire Hill Lane, Tottenham, N.17.
LURIE : SAMUEL, 10 Finsbury Park Road, London, N.4.
MCINTOSH : LESLIE, 2 Strathmore Place, Meigle, Perthshire.
MARTIN : WILFRED, 100 Grovehall Drive, Beeston, Leeds 11.
MATHER : ARTHUR OWEN, 9 Priory Crescent, Gedling, Nottingham.
MERSON : JOHN, Old Kirk, Oldmeldrum, Aberdeenshire.
MONTGOMERY : THOMAS W., Wallington Lodge, Booterstown, Dublin, Ireland.
MOXON : JOHN FREDERICK, Whincroft, Drakes Avenue, Littleham Cross, Exmouth.
NAPPER : GEORGE JOHN, 58 Stockwell Park Crescent, S.W.9.
NEWTON-WADE : CLAUDE MICHAEL SOMERSET, 61 Church Road, Whitchurch, Cardiff.
OWLES : ALAN BEAUMONT, "Bontddu," 129 Littleover Lane, Derby.
PENMAN : Larmont Douglas, Dunallan, Prestwick.
PETTY : DAVID JOHN, Kingsfield School, Oxhey, Herts.
POCHIN : VICTOR HAROLD BARKBY, The Grammar School, Dartford, Kent.
POOLE : JOHN REGINALD MAURICE, 316 Shooter's Hill Road, Blackheath.
QUYSNER, CHARLES WILLIAM, Broadhurst Farm, Dicconson Lane, Westhoughton.
REID : SAMUEL, 46 Oakland Avenue, Bloomfield, Belfast.
RICHARDSON : TOM, 7 Wynngate Terrace, Wingate, Co. Durham.
RIDSDALE : RICHARD OSWALD, 31 Gray's Road, Grange Estate, Stockton-on-Tees.
SADLER : DAVID ALEXANDER, 74 Hammerfield Avenue, Aberdeen.
SAMARASEKERA : AGAMPODI JUSTIN VICTOR DE ZOYSA, Public Works Dept., Colombo, Ceylon.
SIMPSON : JOHN EDWIN, 127 St. Leonard Street, Sunderland, Co. Durham.
SMITH : ALBERT EDWIN, 51 Campbell Avenue, Ilford, Essex.
SMITH : HUGH STANDING, 20 Avenue Road, Newcastle-on-Tyne.
SMITH : PETER WHITEHALL, Whitehall, Poplar Avenue, Saddlebow, King's Lynn.
SMITH : ROY SEATON WILSON, 8 Bishopswood Road, Highgate, N.6.
SRINIVASAN : RAMNARAYAN, c/o. Messrs. Jackson & Barker, 200 Mount Road, Madras.
WALSH : LESLIE ALBERT, 51 Scawen Road, Deptford, S.E.8.
WATSON : EDWIN STEPHEN, Bolton Percey, Argyll Road, Bournemouth.
WELLS : CLIFFORD BURNARD, 86 Queen Elizabeth's Walk, Stoke Newington, N.16.
WILLIAMS : HARRY LYON, Thurlestone, West Cults, Aberdeenshire.
WILLIAMS : SAMUEL RHYS, "Gorwyl," Porthdafarch Road, Holyhead.
WILLIAMSON : JOHN FREDERICK, 14 Beetham Place, Layton, Blackpool.

Notices

THE NINTH GENERAL MEETING, MONDAY, 4 APRIL 1938, AT 8.20 P.M.

The Ninth General Meeting of the Session 1937-1938 will be held at 8.30 p.m. on Monday, 4 April 1938, for the following purposes :—

To read the Minutes of the Eighth General Meeting held on Monday, 21 March 1938.

To present the Royal Gold Medal 1938 to Mr. Ivar Tengbom (Hon. Corresponding Member R.I.B.A., Sweden).

Evening dress optional.

THE HEALTH, SPORT AND FITNESS EXHIBITION, WEDNESDAY, 2 MARCH, TO THURSDAY, 31 MARCH 1938

The Health, Sport and Fitness Exhibition, which was opened on Wednesday, 2 March 1938, by the Rt. Hon. Lord Aberdare, Chairman of the National Fitness Council, will remain open until Thursday, 31 March, between the hours of 10 a.m. and 8 p.m. (Saturday 10 a.m. and 5 p.m.).

On Wednesday, 23 March, at 6.30 p.m., the fourth of the series of lectures which have been arranged in conjunction

with the Exhibition will be given by Mr. W. W. Wakefield, M.P., on "Organising Sport."

Admission is free and no tickets are required.

MUSICAL EVENING: 7 APRIL 1938

Under the auspices of the R.I.B.A. Music Group, a Musical Evening will be held at the Institute on Thursday, 7 April, at 8.30 p.m., to which all members and students of the R.I.B.A. are invited.

There will be no charge for admission but programmes will be on sale and it is hoped that members who wish to support the concert will contribute more than the bare minimum.

BRITISH ARCHITECTS' CONFERENCE, BRISTOL 22-25 JUNE 1938

The Annual Conference of the Royal Institute of British Architects and of its Allied and Associated Societies will take place at Bristol from 22 to 25 June 1938.

The Wessex Society of Architects have in hand the preparation of a most attractive programme and particulars will be issued in due course.

All members and students of the R.I.B.A. and all members and students of the Architectural Association and the Allied Societies are cordially invited to attend the Conference.

It is expected that there will be a large attendance of members from all parts of the country, and they are urgently requested to arrange for their hotel accommodation at the earliest possible date so as to avoid the risk of a disappointment.

The Executive Committee of the Conference have kindly furnished the following list of hotels with charges :—

Bristol		Tel.	*Bed and Breakfast*	*Full Board per day*
The Royal Hotel	(L)	23591	11/6	18/0
The Grand Hotel	(L)	21645	9/6	16/6
Clifton Down	(L)	35235	from 8/6	from 12/6
Bobby's Hotel	(UL)	20194	8/6	12/6
Bristol Hydro	(UL)	25851	from 8/6	from 12/6
Avenue Hotel	(UL)	359191	—	from 11/6
Lyndale Hotel	(UL)	228161	8/6	12/6
Hawthorns Hotel	(UL)	353951	8/6	from 10/6
St. Vincent's		—	—	—
Rocks Hotel	(L)	36572	8/0	13/6
Grosvenor	(L)	206311	9/6	14/6
George & Railway	(L)	239631	8/6	12/6
Bath				
Grand Pump Room	(L)	3266	11/0	from 20/0
Empire	(L)	4207	12/6	18/0
Pulteney	(L)	3281	12/6	from 18/0
Spa Hotel	(L)	4224	12/6	21/0
Royal	(L)	232511	7/6	13/6
Fernley		3380	9/6	16/6
Francis		450411	from 9/0	—
Pratts		2610	8/6	from 13/6
Weston-super-Mare				
Grand Atlantic	(L)	1533	12/6	16/6
Clevedon				
Walton Park Hotel	(L)	100	9/6	16/6

GARAGES

Bristol		
Cathedral Garage, College Green	Tel.	22451
College Motors, Rupert Street	,,	24041
Day's Garage, 10 Broad Quay	,,	20618
Windmill & Lewis, Merchants Street, Clifton	,,	33021
Western Motor Co., Park Row	,,	21304
Willway, J. S., & Sons, Broad Quay	Tel.	22193
Bristol Motor Co., Lower Clifton Hill	,,	23586
Phippen, H. V., Berkeley Square, Clifton	,,	23334

Garage accommodation can be had at or near hotels listed.

Car Parks convenient to the Victoria Rooms.

It is desirable that members when making application for accommodation should mention that they are attending the Conference

Any further information with regard to accommodation can be obtained from the Conference Secretary, 27 Orchard Street, Bristol.

ROYAL INCORPORATION OF ARCHITECTS IN SCOTLAND ANNUAL CONVENTION 1938

The Annual Convention of the Royal Incorporation of Architects in Scotland will take place at Inverness on Friday and Saturday 3 and 4 June 1938.

BUILDING SURVEYING EXAMINATIONS

The R.I.B.A. Statutory Examination qualifying for candidature as District Surveyor in London and the R.I.B.A. Examination qualifying for candidature as Building Surveyor under Local Authorities will be held at the R.I.B.A. on 4, 5 and 6 May 1938.

Applications for admission to either examination must be made not later than 4 April 1938, on the prescribed form to be obtained from the Secretary, R.I.B.A., 66 Portland Place, London, W.1.

THE R.I.B.A. REGISTER OF ASSISTANTS SEEKING ENGAGEMENTS

Members and Students of the R.I.B.A. and the Allied and Associated Societies are reminded that a Register of Assistants seeking engagements is kept at the offices of the Royal Institute.

An assistant seeking employment should obtain from the Secretary R.I.B.A. the necessary form (to be filled up in duplicate) on which particulars must be given as to the applicant's age, qualifications, salary required, references, etc.

The application will hold good for one month from the date of receipt, after which it must be renewed unless the applicant has meanwhile obtained employment.

Architects, whether members of the R.I.B.A. or not, will be furnished on application with the names and addresses of persons desiring employment as assistants, improvers or clerks of works as the case may be. Architects applying for assistants should give the following particulars of their requirements : (1) whether temporary or permanent engagement ; (2) junior, or senior assistants ; (3) particulars of duties and style of work ; (4) salary offered.

ASSOCIATES AND THE FELLOWSHIP

Associates who are eligible and desirous of transferring to the Fellowship are reminded that if they wish to take advantage of the election to take place on 20 June 1938 they should send the necessary nomination forms to the Secretary R.I.B.A. not later than Saturday, 9 April 1938.

NEW BUILDING MATERIALS AND PREPARATIONS

The Science Standing Committee wish to draw attention to the fact that information in the records of the Building Research Station, Garston, Watford, is freely available to any member of the architectural profession, and suggest that architects would be well advised, when considering the use of new materials and preparations of which they have had no previous experience, to apply to the Director for any information he can impart regarding their properties and application.

Competitions

The Council and Competitions Committee wish to remind members and members of Allied Societies that it is their duty to refuse to take part in competitions unless the conditions are in conformity with the R.I.B.A. Regulations for the Conduct of Architectural Competitions and have been approved by the Institute.

While, in the case of small limited private competitions, modifications of the R.I.B.A. Regulations may be approved, it is the duty of members who are asked to take part in a limited competition to notify the Secretary of the R.I.B.A. immediately, submitting particulars of the competition. This requirement now forms part of the Code of Professional Practice in which it is ruled that a formal invitation to two or more architects to prepare designs in competition for the same project is deemed a limited competition.

ADWICK-LE-STREET: NEW COUNCIL OFFICES

The Urban District Council of Adwick-le-Street invite architects whose offices are situated in the West Riding of Yorkshire to submit in competition designs for new Council Offices.

Assessor: Mr. John C. Procter, M.C. [*F.*].

Premiums: £50, £40 and £30.

Last day for submitting designs: 30 August 1938.

Last day for questions: 23 April 1938.

Conditions of the competition may be obtained on application to Mr. C. R. Marshall, Clerk to the Adwick-le-Street Urban District Council, Bank Chambers, High Street, Doncaster. Deposit £1 1s.

CHESTER: EXTENSIONS TO CHESTER ROYAL INFIRMARY

The Council of the Chester Royal Infirmary invite architects of British nationality domiciled in the United Kingdom to submit in competition designs for new hospital buildings and alterations to existing buildings of the Royal Infirmary.

Assessor: Mr. Arthur J. Hope [*F.*]

Premiums: £300, £200 and £100.

The last day for submitting designs has been extended to 31 May 1938.

Last day for questions: 12 February 1938.

Conditions of the competition may be obtained on application to Mr. J. Rowse Mitchell, Secretary, The Chester Royal Infirmary, Chester. Deposit £1 1s.

DUNDEE DUNCAN OF JORDANSTONE COLLEGE OF ART

The Governors of the Dundee Institute of Art and Technology invite architects of British nationality domiciled in the United Kingdom to submit in competition designs for the Duncan of Jordanstone College of Art proposed to be erected on a site in Perth Road, Dundee.

Assessor: Mr. Julian R. Leathart [*F.*].

Premiums: £500, £250 and £150.

The last day for submitting designs has been extended to 30 May 1938.

Last day for questions: 19 January 1938.

Conditions of the competition may be obtained on application to the Clerk and Treasurer, Dundee Institute of Art and Technology, Bell Street, Dundee, Angus. Deposit £1 1s

OXFORD: NEW CREMATORIUM

The Oxford Crematorium Ltd. are proposing to hold a competition open to architects practising or resident in the counties of Oxfordshire, Buckinghamshire and Berkshire for a new Crematorium.

Assessor: Sir Guy Dawber, R.A., F.S.A., P.-P.R.I.B.A.

Premiums: £100, £60 and £40.

Last day for receiving designs: 14 May 1938.

Last day for questions: 9 April 1938.

Conditions of the competition may be obtained on application to the Secretary, Oxford Crematorium Ltd., 55 Cornmarket Street, Oxford. Deposit £1 1s.

REDCAR: THE DEVELOPMENT OF THE "STRAY"

The Corporation of Redcar, Yorks, invite architects to submit in competition designs for the layout of, and buildings to be erected on, the "Stray" at the front of Zetland Park, Redcar.

Assessor: Professor Patrick Abercrombie [*V.-P.R.I.B.A.*]

Premiums: £250, £100, and £50.

The last day for submitting designs has been extended to 31 March 1938

Last day for questions: 31 December 1937.

ROYAL NATIONAL EISTEDDFOD OF WALES, CARDIFF, 1938: ARCHITECTURAL COMPETITIONS

The Royal National Eisteddfod of Wales are promoting the following two competitions:

(1) For a design for a scheme comprising Physical Culture Centre and Baths. Premiums: £60, £30 and £20.

(2) For a design for a Group of Twelve Dwellings for Aged People. Premiums: £30 and £20.

The Assessor for the competitions is Mr. Percy E. Thomas, O.B.E., Hon. LL.D., Past-President R.I.B.A.

Closing date: 11 June 1938.

Particulars of the competitions may be obtained on application to The General Secretary, Royal National Eisteddfod of Wales, 11 Park Place, Cardiff.

ST. GEORGE'S HOSPITAL: RECONSTRUCTION

The President, Vice-President, Treasurer and Governors of St. George's Hospital invite architects practising in the United Kingdom and Northern Ireland to submit in competition designs for the reconstruction of St. George's Hospital, Hyde Park Corner.

Assessors: Dr. H. V. Lanchester [*F.*].
Mr. T. A. Lodge [*F.*].

Premiums: £500, £300 and £200.

Last day for submitting designs: 30 August 1938.

Last day for questions: 1 March 1938.

Conditions of the competition may be obtained on application to The House Governor, St. George's Hospital, Hyde Park Corner, London, S.W.1. Deposit £2 2s.

SCOTLAND: DESIGNS FOR RURAL COTTAGES

The Department of Health for Scotland, in conjunction with the Royal Incorporation of Architects in Scotland, is promoting a competition open to all architects practising in Scotland for the design of cottages to be built in rural areas.

There are five sections and competitors may submit designs in one or all of the sections as follows :—

1. Three-apartment single-storey cottage.
2. Four-apartment single-storey cottage.
3. Three-apartment double-storey cottage.
4. Four-apartment double-storey cottage.
5. Block of two four-apartment cottages.

Assessors : Mr. Charles G. Soutar [*F.*].
Mr. F. C. Mears, A.R.S.A. [*F.*].
Mr. John Wilson [*F.*].

Premiums : £75 for the selected design in each section.
Last day for submitting designs : 14 May 1938.
Last day for questions : 4 April 1938.

Conditions of the competition may be obtained on application to the Secretary, Department of Health for Scotland, 125 George Street, Edinburgh 2.

WOOD GREEN: COUNCIL OFFICES AND PETTY SESSIONAL COURTS

The Wood Green Town Council invite architects of British nationality to submit in competition designs for new Council Offices and Petty Sessional Courts.

Assessors : Mr. C. H. James, A.R.A. [*F.*].
Mr. S. Rowland Pierce [*A.*].

Premiums : £300, £200 and £100.
Last day for submitting designs : 26 April 1938.
Last day for questions : 2 February 1938.

Conditions of the competition may be obtained on application to Mr. H. Chubb, Town Clerk, Town Hall, Wood Green, London, N.22. Deposit £2 2s.

YEOVIL: NEW TOWN HALL AND MUNICIPAL BUILDINGS

The Yeovil Borough Council invite architects to submit in competition designs for new town hall, municipal offices, public library and museum.

Assessor : Mr. C. Cowles-Voysey [*F.*].
Premiums : £200, £150, £100 and £50.
Last day for submitting designs : 30 June 1938.
Last day for questions : 15 March 1938.

Conditions of the competition may be obtained on application to Mr. H. C. C. Batten, Town Clerk, Municipal Offices, King George Street, Yeovil. Deposit £1 1s.

TIMBER COTTAGE DESIGNS

The Timber Development Association is promoting a competition open to architects and architectural students of British nationality with the object of showing how accommodation for agricultural workers can be provided at an economic rent by timber-built structures. Competitors must submit designs for

(i) semi-detached cottages and
(ii) a group of three cottages.

Assessors : Sir Guy Dawber, R.A., F.S.A. [*F.*].
Mr. C. H. James, A.R.A. [*F.*].
Mr. Edward Maufe [*F.*].
Mr. John Gloag [*Hon. A.*].

Prizes : £100, £50, £25 and six special mention awards of £10 each.

Last day for receiving designs : 2 May 1938.

Conditions of the competition may be obtained on application to The Secretary, Timber Development Association, 47 King William Street, London, E.C.4.

FORTHCOMING COMPETITIONS

Other competitions which it is proposed to hold, and the conditions for which are not yet available, are as follows :—

BRIERLEY HILL, STAFFS.: NEW MUNICIPAL BUILDINGS
Assessor : Mr. Verner O. Rees [*F.*].

EDMONTON: NEW TOWN HALL BUILDINGS
Assessor : Mr. E. Berry Webber [*A.*].

GLOUCESTER: NEW SWIMMING BATH AND FIRE STATION
Assessor : Mr. C. F. W. Dening, R.W.A. [*F.*].

METROPOLITAN EAR, NOSE AND THROAT HOSPITAL: RECONSTRUCTION
Assessors : Messrs. Charles Holden [*F.*] and Lionel G. Pearson [*F.*].

NEWCASTLE-UPON-TYNE: NEW MUNICIPAL BUILDINGS
Assessor : Mr. Verner O. Rees [*F.*].

SOUTH SHIELDS: ASSEMBLY HALL AND LIBRARY
Assessor : Mr. Arthur J. Hope [*F.*].

WREXHAM: NEW TOWN HALL
Assessor : Mr. Herbert J. Rowse [*F.*].

MEMBERS' COLUMN

Owing to limitation of space, notices in this column are restricted to changes of address, partnerships vacant or wanted, practices for sale or wanted, office accommodation, and appointments vacant. Members are reminded that a column in the Advertisement Section of the Journal is reserved for the advertisements of members seeking appointments in architects' offices. No charge is made for such insertions and the privilege is confined to members who are definitely unemployed.

PARTNERSHIP WANTED

FULLY qualified Architect requires partner in London, young Liverpool or A.A. diploma man preferred, with social connections in London. Average gross fees now earned, £4,000 per annum.—Replies in strictest confidence to Box 5338, c/o Secretary R.I.B.A.

NEW PARTNERSHIP

MR. H. H. PARKER [*L.*], formerly of 14 St. John's Street, Cambridge, has entered into partnership with Mr. C. W. Craske. The style and address of the firm is now Craske & Parker, Architects and Surveyors, 20 St. Andrew's Street, Cambridge. Telephone : Cambridge 2010.

OFFICE ACCOMMODATION TO LET

ASSOCIATE member has small office to let in First Avenue House, W.C.1, to young architect at the inclusive rental of £50 per annum. Box 6338, c/o Secretary R.I.B.A.

CHANGES OF ADDRESS

MR. W. F. HOWARD [A.] has moved to 30 Rutland Square, Edinburgh, 1.

MR. ALEC F. FRENCH [L.] has moved to Halifax House, 1-2 St. Augustine's Parade, Bristol, 1. Tel. 23518 (2 lines).

MR. K. A. PARELKAR [A.] has moved to c/o Architectural Studio, Prospect Chambers, 315/317 Hornby Road, Fort, Bombay.

MR. CHARLES SCOTT has moved to 8 Grove Avenue, Norwich.

MINUTES VII

SESSION 1937-1938

At the Seventh General Meeting of the Session 1937-1938, held on Monday, 7 March 1938, at 8 p.m.

Mr. H. S. Goodhart-Rendel (President) in the chair.

The meeting was attended by about 230 members and guests.

The Minutes of the Sixth General Meeting held on Monday, 21 February 1938, having been published in the JOURNAL were taken as read, confirmed and signed as correct.

The Hon. Secretary announced the decease of :—

William Douglas Caröe, elected Fellow 1890.

Mr. Caröe was President of the Architectural Association in 1895 and 1896, and a member of the R.I.B.A. Council from 1894 to 1903, and from 1905 to 1907. He also served for many years on the Prizes and Studentships Committee, Art Standing Committee and Competitions Committee.

Robert Clarke Edwards, elected Feilow 1876.

Alexander Henry Kersey, elected Associate 1879, Fellow 1889.

Mr. Kersey was Donaldson Medallist 1868-69 and Institute Medallist (Drawings) 1873. He served for many years on the Board of Examiners and the Practice Standing Committee, and as an Hon. Examiner and Statutory Examiner.

James Hutcheson de Caynoth Ballardie, elected Associate 1906.

Sydney William Davis, elected Associate 1918.

John Austen Rixon, elected Associate 1937.

Gordon Pettigrew Graham Hills, elected Associate 1892, transferred to Retired Associateship 1935.

Frederick George Cook, transferred to Licentiateship 1925.

William George Fagg, elected Licentiate 1911.

And it was resolved that the regrets of the Institute for their loss be entered on the Minutes and that a message of sympathy and condolence be conveyed to their relatives.

The following members attending for the first time since their election were formally admitted by the President :—

Fellows.

A. L. Farman.
W. Harkess.

Associates.

A. E. A. Dod.
John A. Le Rossignol.
H. N. Player.
G. P. Scott.
R. P. Shannon.
John Y. T. Stoneham.

Licentiates.

Charles E. F. Buhl.
J. W. Spence.

Mr. Edwin Gunn [A.] having read a Paper on "Problems of a Rural Practice," a discussion ensued, and on the motion of Col. The Rt. Hon. Sir George Courthope, Bt., P.C., M.C., M.P., seconded by Mr. Leslie S. Wood (President of the Land Agents' Society, Incorporated), a vote of thanks was passed to Mr. Gunn by acclamation and was briefly responded to.

The proceedings closed at 9.50 p.m.

Architects' and Surveyors' Approved Society

ARCHITECTS' ASSISTANTS' INSURANCE FOR THE NATIONAL HEALTH AND PENSIONS ACTS

Architects' Assistants are advised to apply for the prospectus of the Architects' and Surveyors' Approved Society, which may be obtained from the Secretary of the Society, 113 High Holborn, London. W.C.1.

The Society deals with questions of insurability for the National Health and Pensions Acts (for England) under which, in general, those employed at remuneration not exceeding £250 per annum are compulsorily insurable.

In addition to the usual sickness, disablement and maternity benefits, the Society makes grants towards the cost of dental or optical treatment (including provision of spectacles).

No membership fee is payable beyond the normal Health and Pensions Insurance contribution.

The R.I.B.A. has representatives on the Committee of Management, and insured Assistants joining the Society can rely on prompt and sympathetic settlement of claims.

Architects Benevolent Society

TO ARCHITECTS :

Advise your clients to acquire their houses in the Life Assurance way.

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Write for particulars to : The Secretary, A.B.S., Insurance Dept., 66 Portland Place, London, W.1. Telephone : Welbeck 5721.

It is desired to point out that the opinions of writers of articles and letters which appear in the R.I.B.A. JOURNAL must be taken as the individual opinions of their authors and not as representative expressions of the Institute.

Members sending remittances by postal order for subscriptions of Institute publications are warned of the necessity of complying with Post Office Regulations with regard to this method of payment. Postal orders should be made payable to the Secretary R.I.B.A. and crossed.

Members wishing to contribute notices or correspondence must send them addressed to the Editor not later than the Tuesday prior to the date of publication.

R.I.B.A. JOURNAL

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